



SEQUENCE LISTING

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<120> Treatment of SARS in individuals

<130> P 774 US00

<140> PCT/DK 04/000266

<141> 2004-04-08

<160> 137

<170> PatentIn version 3.1

<210> 1
<211> 652
<212> PRT
<213> Homo sapiens

<400> 1

Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Leu Thr
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20 25 30

Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
35 40 45

Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
50 55 60

Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu
65 70 75 80

Arg Arg Glu Ala Ala Leu Thr Ala Arg Met Ser Lys Phe Trp Ile Gly
85 90 95

Leu Gln Arg Glu Lys Gly Lys Cys Leu Asp Pro Ser Leu Pro Leu Lys
100 105 110

Gly Phe Ser Trp Val Gly Gly Glu Asp Thr Pro Tyr Ser Asn Trp
115 120 125

His Lys Glu Leu Arg Asn Ser Cys Ile Ser Lys Arg Cys Val Ser Leu
130 135 140

Leu Leu Asp Leu Ser Gln Pro Leu Leu Pro Ser Arg Leu Pro Lys Trp
145 150 155 160

Ser Glu Gly Pro Cys Gly Ser Pro Gly Ser Pro Gly Ser Asn Ile Glu
165 170 175

Gly Phe Val Cys Lys Phe Ser Phe Lys Gly Met Cys Arg Pro Leu Ala
180 185 190

Leu Gly Gly Pro Gly Gln Val Thr Tyr Thr Thr Pro Phe Gln Thr Thr
195 200 205

Ser Ser Ser Leu Glu Ala Val Pro Phe Ala Ser Ala Ala Asn Val Ala
210 215 220

Cys Gly Glu Gly Asp Lys Asp Glu Thr Gln Ser His Tyr Phe Leu Cys
225 230 235 240

Lys Glu Lys Ala Pro Asp Val Phe Asp Trp Gly Ser Ser Gly Pro Leu
245 250 255

Cys Val Ser Pro Lys Tyr Gly Cys Asn Phe Asn Asn Gly Gly Cys His
260 265 270

Gln Asp Cys Phe Glu Gly Asp Gly Ser Phe Leu Cys Gly Cys Arg
275 280 285

Pro Gly Phe Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn
290 295 300

Pro Cys Ser Ser Pro Cys Arg Gly Gly Ala Thr Cys Val Leu Gly
305 310 315 320

Pro His Gly Lys Asn Tyr Thr Cys Arg Cys Pro Gln Gly Tyr Gln Leu
325 330 335

Asp Ser Ser Gln Leu Asp Cys Val Asp Val Asp Glu Cys Gln Asp Ser
340 345 350

Pro Cys Ala Gln Glu Cys Val Asn Thr Pro Gly Gly Phe Arg Cys Glu
355 360 365

Cys Trp Val Gly Tyr Glu Pro Gly Gly Pro Gly Glu Gly Ala Cys Gln
370 375 380

Asp Val Asp Glu Cys Ala Leu Gly Arg Ser Pro Cys Ala Gln Gly Cys
385 390 395 400

Thr Asn Thr Asp Gly Ser Phe His Cys Ser Cys Glu Glu Gly Tyr Val
405 410 415

Leu Ala Gly Glu Asp Gly Thr Gln Cys Gln Asp Val Asp Glu Cys Val
420 425 430

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly
450 455 460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Glu Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Pro Gly Val Trp
530 535 540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 2
<211> 742
<212> PRT
<213> Mus musculus

<400> 2

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Asn Trp Ala Leu Lys Phe Ser Ile Val Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Asp Gly Met Glu Thr Ser His Gln Thr Tyr Asp
65 70 75 80

Asn Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Ala Gly Lys Lys Ala Leu Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Asn Gly Asp
130 135 140

Ser Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Gln Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Ser Gln Met Tyr Ser Gln Ser Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Ser Asn Leu Gln
210 215 220

Gln Ser Val Asp Asp Thr Ser Leu Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Ser Ser Phe Thr Gly Gln Met Asp Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Ser Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Thr Glu Asn Arg Thr Ala Val Lys Phe Ser Gln Leu Glu Arg Phe
325 330 335

Gln Val Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Asp Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Arg His Thr Asp Asp Leu Thr Ser

370

375

380

Leu Asn Asn Thr Leu Val Asn Ile Arg Leu Asp Ser Ile Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Met Met Arg Ser Lys Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Val Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Lys Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Thr Ile Gly Pro Val Gly Pro Pro Gly Glu Arg
485 490 495

Gly Ser Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Met Glu Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Ser Glu Val Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Leu Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Ser Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

His Thr Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Gln Glu Ser Glu Trp Lys Trp Leu Asp Gly Ser Pro Val Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly Ser Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Asp Glu Ile Asn Asn Phe Ile Cys Glu Lys Glu Arg Glu Ala
725 730 735

Val Pro Ser Ser Ile Leu
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<211> 371
<212> PRT
<213> Bos taurus

<400> 3

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Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Leu Ala
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Asn Gly Cys Thr Leu Val Val Cys Arg Pro Pro Glu Gly Gly Leu Pro
35 40 45

Gly Arg Asp Gly Gln Asp Gly Arg Glu Gly Pro Gln Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Met
130 135 140

Gly Ala Pro Gly Met Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
145 150 155 160

Glu Arg Gly Ala Pro Gly Glu Leu Gly Ala Pro Gly Ser Ala Gly Val
165 170 175

Ala Gly Pro Ala Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Arg Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Asp Val Asn Ala Leu Lys Gln Arg
210 215 220

Val Thr Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
225 230 235 240

Arg Tyr Lys Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Lys
245 250 255

Lys Ile Phe Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Gln
260 265 270

Gln Leu Cys Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ala
275 280 285

Ala Glu Asn Glu Ala Val Ala Gln Leu Val Arg Ala Lys Asn Asn Asp
290 295 300

Ala Phe Leu Ser Met Asn Asp Ile Ser Thr Glu Gly Lys Phe Thr Tyr
305 310 315 320

Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn Trp Ala Ser Gly Glu Pro
325 330 335

Asn Asn Asn Asn Ala Gly Gln Pro Glu Asn Cys Val Gln Ile Tyr Arg
340 345 350

Glu Gly Lys Trp Asn Asp Val Pro Cys Ser Glu Pro Leu Leu Val Ile
355 360 365

Cys Glu Phe
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<210> 4
<211> 371
<212> PRT
<213> Bos taurus

<400> 4

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Leu Ala
20 25 30

Asn Gly Cys Thr Leu Val Val Cys Arg Pro Pro Glu Gly Gly Leu Pro
35 40 45

Gly Arg Asp Gly Gln Asp Gly Arg Glu Gly Pro Gln Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Met
130 135 140

Gly Ala Pro Gly Met Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
145 150 155 160

Glu Arg Gly Ala Pro Gly Glu Leu Gly Ala Pro Gly Ser Ala Gly Val
165 170 175

Ala Gly Pro Ala Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Arg Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Asp Val Asn Ala Leu Lys Gln Arg
210 215 220

Val Thr Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
225 230 235 240

Arg Tyr Lys Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Lys
245 250 255

Lys Ile Phe Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Gln
260 265 270

Gln Leu Cys Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ala
275 280 285

Ala Glu Asn Glu Ala Val Ala Gln Leu Val Arg Ala Lys Asn Asn Asp
290 295 300

Ala Phe Leu Ser Met Asn Asp Ile Ser Thr Glu Gly Lys Phe Thr Tyr
305 310 315 320

Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn Trp Ala Ser Gly Glu Pro
325 330 335

Asn Asn Asn Ala Gly Gln Pro Glu Asn Cys Val Gln Ile Tyr Arg

340

345

350

Glu Gly Lys Trp Asn Asp Val Pro Cys Ser Glu Pro Leu Leu Val Ile
355 360 365

Cys Glu Phe
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<210> 5
<211> 420
<212> PRT
<213> Mus musculus

<400> 5

Met Asn Gly Phe Arg Val Leu Leu Arg Ser Asn Leu Ser Met Leu Leu
1 5 10 15

Leu Leu Ala Leu Leu His Phe Gln Ser Leu Gly Leu Asp Val Asp Ser
20 25 30

Arg Ser Ala Ala Glu Val Cys Ala Thr His Thr Ile Ser Pro Gly Pro
35 40 45

Lys Gly Asp Asp Gly Glu Arg Gly Asp Thr Gly Glu Glu Gly Lys Asp
50 55 60

Gly Lys Val Gly Arg Gln Gly Pro Lys Gly Val Lys Gly Glu Leu Gly
65 70 75 80

Asp Met Gly Ala Gln Gly Asn Ile Gly Lys Ser Gly Pro Ile Gly Lys
85 90 95

Lys Gly Asp Lys Gly Glu Lys Gly Leu Leu Gly Ile Pro Gly Glu Lys
100 105 110

Gly Lys Ala Gly Thr Ile Cys Asp Cys Gly Arg Tyr Arg Lys Val Val
115 120 125

Gly Gln Leu Asp Ile Ser Val Ala Arg Leu Lys Thr Ser Met Lys Phe
130 135 140

Ile Lys Asn Val Ile Ala Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr
145 150 155 160

Tyr Ile Val Gln Glu Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys
165 170 175

Arg Ile Arg Gly Gly Met Leu Ala Met Pro Lys Asp Glu Val Val Asn
180 185 190

Thr Leu Ile Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe
195 200 205

Ile Gly Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Val Phe Thr Asp
210 215 220

Asn Thr Pro Leu Gln Asn Tyr Ser Asn Trp Lys Glu Glu Glu Pro Ser
225 230 235 240

Asp Pro Ser Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly Arg
245 250 255

Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Ser Ser Leu
260 265 270

Gln Glu Asp Leu Ile Glu Asp Cys Leu Arg Glu Gln Gly Leu Leu Val
275 280 285

Gln Val Thr Pro Ala Asn Gln Glu Leu Leu Phe Gly Ile Asp Thr Phe
290 295 300

Leu Gly Pro Met Ser Cys Val Tyr Gln Arg Thr Gly Thr Lys Gln Lys
305 310 315 320

Leu Tyr Ser Gln Cys Arg Leu Trp Asp Gly Leu Ala Lys Lys Gln Thr
325 330 335

Asn Glu Thr Ala Asn Ile Ala Thr Phe Cys Lys Gly Ala Glu Pro Asn
340 345 350

Arg Gly Ser Arg Pro Cys Gly Gln Lys Gln Glu Met Met Thr Leu Met
355 360 365

Met Ser Gly Asn Lys Gly Ile Thr Thr Phe Pro Glu Ser Asp Asn Leu
370 375 380

Phe Lys Trp Val Gly Thr Met Leu Gly Ala Ala Gly Thr Ile Asp Glu
385 390 395 400

Asp Leu Lys Tyr Lys Leu Ser Leu Asn Ser Pro Val Val Thr Leu Ile
405 410 415

Ile His Pro Gln
420

<210> 6
<211> 742
<212> PRT
<213> Mus musculus

<400> 6

Met Lys Asp Asp Phe Ala Glu Glu Glu Val Gln Ser Phe Gly Tyr
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Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Val Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Asp Gly Met Glu Thr Ser His Gln Thr Tyr Asp
65 70 75 80

Asn Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Ala Gly Lys Lys Ala Leu Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Gln Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Asn Gly Asp
130 135 140

Ser Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Gln Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly

165

170

175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Ser Gln Met Tyr Ser Gln Ser Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Ser Asn Leu Gln
210 215 220

Gln Ser Val Asp Asp Thr Ser Leu Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Ser Ser Phe Thr Gly Gln Met Asp Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Ser Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Thr Glu Asn Arg Thr Ala Val Lys Phe Ser Gln Leu Glu Glu Arg Phe
325 330 335

Gln Val Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Asp Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Arg His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Val Asn Ile Arg Leu Asp Ser Ile Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Met Met Arg Ser Lys Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Val Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Lys Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Thr Ile Gly Pro Val Gly Pro Pro Gly Glu Arg
485 490 495

Gly Ser Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Met Glu Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Ser Glu Val Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Leu Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser

625

630

635

640

His Leu Val Phe Ile Asn Ser Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

His Thr Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Gln Glu Ser Glu Trp Lys Trp Leu Asp Gly Ser Pro Val Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly Ser Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Asp Glu Ile Asn Asn Phe Ile Cys Glu Lys Glu Arg Glu Ala
725 730 735

Val Pro Ser Ser Ile Leu
740

<210> 7
<211> 251
<212> PRT
<213> Danio rerio

<400> 7

Met Ala Leu Leu Lys Leu Phe Leu Gly Ala Leu Leu Leu Leu Gln Leu
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Val Leu Gln Leu Met Ala Gly Ala Ala Asp Pro Gln Ser Leu Asn Cys
20 25 30

Pro Ala Tyr Ala Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Val Gly Arg Asp Gly Ala Asn Gly Pro Lys Gly
50 55 60

Glu Lys Gly Glu Pro Gly Val Asn Val Gln Gly Pro Pro Gly Lys Ala
65 70 75 80

Gly Pro Pro Gly Pro Ala Gly Ala Lys Gly Glu Arg Gly Pro Ser Gly
85 90 95

Leu Pro Gly Gln Asp Cys Met Ser Asp Ser Leu Lys Ser Glu Leu Gln
100 105 110

Lys Leu Ser Asp Lys Ile Ala Leu Ile Glu Lys Val Val Asn Phe Lys
115 120 125

Thr Phe Lys Lys Val Gly Gln Lys Tyr Tyr Val Thr Asp Asp Val Glu
130 135 140

Glu Thr Phe Asp Lys Gly Met Gln Tyr Cys Ser Ser Asn Gly Gly Ala
145 150 155 160

Leu Val Leu Pro Arg Thr Leu Glu Glu Asn Ala Leu Leu Lys Val Phe
165 170 175

Val Ser Ser Ala Phe Lys Arg Leu Phe Ile Arg Ile Thr Asp Arg Glu
180 185 190

Lys Glu Gly Glu Phe Val Asp Thr Asp Arg Lys Lys Leu Thr Phe Thr
195 200 205

Asn Trp Gly Pro Asn Gln Pro Asp Asn Tyr Lys Gly Ala Gln Asp Cys
210 215 220

Gly Ala Ile Ala Asp Ser Gly Leu Trp Asp Asp Val Ser Cys Asp Ser
225 230 235 240

Leu Tyr Pro Ile Ile Cys Glu Ile Glu Ile Lys
245 250

<210> 8
<211> 742
<212> PRT
<213> Homo sapiens

<400> 8

Met Lys Asp Asp Phe Ala Glu Glu Glu Val Gln Ser Phe Gly Tyr
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Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Ile Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Gly Gly Met Glu Thr Ser Arg Gln Thr Tyr Asp
65 70 75 80

Asp Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Thr Gly Lys Lys Ala Ile Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Arg Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Ser Gly Asp
130 135 140

Ala Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Glu Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Asn Gln Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln
210 215 220

Arg Ser Val Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn

260

265

270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Asn Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Ala Glu Asn Arg Thr Ala Ile Lys Phe Asn Gln Leu Glu Glu Arg Phe
325 330 335

Gln Leu Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Glu Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Lys His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Ala Asn Ile Arg Leu Asp Ser Val Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Arg Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly Glu Arg
485 490 495

Gly Gly Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Val Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Thr Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

Gln Met Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Arg Glu Asn Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly His Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Glu Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg Glu Thr

725

730

735

Val Leu Ser Ser Ala Leu
740

<210> 9
<211> 622
<212> PRT
<213> Homo sapiens

<400> 9

Met Lys Asp Asp Phe Ala Glu Glu Glu Val Gln Ser Phe Gly Tyr
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Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Ile Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Gly Gly Met Glu Thr Ser Arg Gln Thr Tyr Asp
65 70 75 80

Asp Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Thr Gly Lys Lys Ala Ile Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Arg Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Ser Gly Asp
130 135 140

Ala Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Glu Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Asn Gln Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln
210 215 220

Arg Ser Val Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Asn Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Ala Glu Asn Arg Thr Ala Ile Lys Phe Asn Gln Leu Glu Glu Arg Phe
325 330 335

Gln Leu Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Glu Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Lys His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Ala Asn Ile Arg Leu Asp Ser Val Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Arg Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly Glu Arg
485 490 495

Gly Gly Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Ser Lys Ser
595 600 605

Lys Pro Ser Leu Gln Pro Gly Gly Gln Gly Ser Ala Cys Ala
610 615 620

<210> 10
<211> 742
<212> PRT
<213> Mus musculus

<400> 10

Met Lys Asp Asp Phe Ala Glu Glu Glu Val Gln Ser Phe Gly Tyr
1 5 10 15

Lys Arg Phe Gly Ile His Glu Gly Thr Gln Cys Thr Lys Cys Ile Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Val Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Ser Asp Gly Met Glu Thr Ser His Gln Thr Tyr Asp
65 70 75 80

Asn Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Ala Gly Lys Lys Ala Leu Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Gln Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Asn Gly Asp
130 135 140

Ser Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Gln Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Asn Val Leu Gln Gly Asn Leu
180 185 190

Gln Ser Gln Met Tyr Ser Gln Ser Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Ser Asn Leu Gln
210 215 220

Gln Ser Val Asp Asp Thr Ser Leu Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Ser Ser Phe Thr Gly Gln Met Asp Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Ser Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Thr Glu Asn Arg Thr Ala Val Lys Phe Ser Gln Leu Glu Glu Arg Phe
325 330 335

Gln Val Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Asp Val Trp
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Arg His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Val Asn Ile Arg Leu Asp Ser Ile Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Met Met Arg Ser Lys Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Val Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Lys Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly

450

455

460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Thr Ile Gly Pro Val Gly Pro Pro Gly Glu Arg
485 490 495

Gly Ser Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Met Glu Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Ser Glu Val Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Leu Glu
610 615 620

Lys Glu Ile Leu Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Ser Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

His Thr Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Gln Glu Ser Glu Trp Lys Trp Leu Asp Gly Ser Pro Val Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly Ser Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Asp Glu Ile Asn Asn Phe Ile Cys Glu Lys Glu Arg Glu Ala
725 730 735

Val Pro Ser Ser Ile Leu
740

<210> 11
<211> 321
<212> PRT
<213> Bos taurus

<400> 11

Met Leu Pro Leu Pro Leu Ser Ile Leu Leu Leu Leu Thr Gln Ser Gln
1 5 10 15

Ser Phe Leu Gly Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr
20 25 30

Asp Pro Cys Thr Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg
35 40 45

Gly His Asp Gly Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly
50 55 60

Asp Pro Gly Pro Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro
65 70 75 80

Ser Gly Arg Gln Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys
85 90 95

Gly Glu Pro Gly Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly
100 105 110

Ser Pro Gly Pro Ala Gly Leu Lys Gly Glu Arg Gly Thr Pro Gly Pro
115 120 125

Gly Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro
130 135 140

Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly
145 150 155 160

Glu Thr Ser Val Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn
165 170 175

Leu Glu Gly Glu Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg
180 185 190

Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe
195 200 205

Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys
210 215 220

Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn
225 230 235 240

Glu Ala Val Thr Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu
245 250 255

Ser Met Asn Asp Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly
260 265 270

Gly Ser Leu Asp Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg
275 280 285

Ala Lys Asp Glu Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly
290 295 300

Asn Trp Asn Asp Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu
305 310 315 320

Phe

<210> 12
<211> 321
<212> PRT
<213> Bos taurus

<400> 12

Met Leu Pro Leu Pro Leu Ser Ile Leu Leu Leu Leu Thr Gln Ser Gln

1

5

10

15

Ser Phe Leu Gly Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr
20 25 30

Asp Pro Cys Thr Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg
35 40 45

Gly His Asp Gly Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly
50 55 60

Asp Pro Gly Pro Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro
65 70 75 80

Ser Gly Arg Gln Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys
85 90 95

Gly Glu Pro Gly Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly
100 105 110

Ser Pro Gly Pro Ala Gly Leu Lys Gly Glu Arg Gly Thr Pro Gly Pro
115 120 125

Gly Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro
130 135 140

Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly
145 150 155 160

Glu Thr Ser Val Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn
165 170 175

Leu Glu Gly Glu Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg
180 185 190

Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe
195 200 205

Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys
210 215 220

Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn
225 230 235 240

Glu Ala Val Thr Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu
245 250 255

Ser Met Asn Asp Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly
260 265 270

Gly Ser Leu Asp Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg
275 280 285

Ala Lys Asp Glu Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly
290 295 300

Asn Trp Asn Asp Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu
305 310 315 320

Phe

<210> 13
<211> 272
<212> PRT
<213> Mus musculus

<400> 13

Met Met Met Arg Asp Leu Ala Leu Ala Gly Met Leu Ile Ser Leu Ala
1 5 10 15

Phe Leu Ser Leu Leu Pro Ser Gly Cys Pro Gln Gln Thr Thr Glu Asp
20 25 30

Ala Cys Ser Val Gln Ile Leu Val Pro Gly Leu Lys Gly Asp Ala Gly
35 40 45

Glu Lys Gly Asp Lys Gly Ala Pro Gly Arg Pro Gly Arg Val Gly Pro
50 55 60

Thr Gly Glu Lys Gly Asp Met Gly Asp Lys Gly Gln Lys Gly Thr Val
65 70 75 80

Gly Arg His Gly Lys Ile Gly Pro Ile Gly Ala Lys Gly Glu Lys Gly
85 90 95

Asp Ser Gly Asp Ile Gly Pro Pro Gly Pro Ser Gly Glu Pro Gly Ile
100 105 110

Pro Cys Glu Cys Ser Gln Leu Arg Lys Ala Ile Gly Glu Met Asp Asn
115 120 125

Gln Val Thr Gln Leu Thr Thr Glu Leu Lys Phe Ile Lys Asn Ala Val
130 135 140

Ala Gly Val Arg Glu Thr Glu Ser Lys Ile Tyr Leu Leu Val Lys Glu
145 150 155 160

Glu Lys Arg Tyr Ala Asp Ala Gln Leu Ser Cys Gln Ala Arg Gly Gly
165 170 175

Thr Leu Ser Met Pro Lys Asp Glu Ala Ala Asn Gly Leu Met Ala Ser
180 185 190

Tyr Leu Ala Gln Ala Gly Leu Ala Arg Val Phe Ile Gly Ile Asn Asp
195 200 205

Leu Glu Lys Glu Gly Ala Phe Val Tyr Ser Asp Arg Ser Pro Met Gln
210 215 220

Thr Phe Asn Lys Trp Arg Ser Gly Glu Pro Asn Asn Ala Tyr Asp Glu
225 230 235 240

Glu Asp Cys Val Glu Met Val Ala Ser Gly Gly Trp Asn Asp Val Ala
245 250 255

Cys His Ile Thr Met Tyr Phe Met Cys Glu Phe Asp Lys Glu Asn Leu
260 265 270

<210> 14
<211> 239
<212> PRT
<213> Mus musculus

<400> 14

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys

35

40

45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 15
<211> 244
<212> PRT
<213> Mus musculus

<400> 15

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 16
<211> 277
<212> PRT
<213> Homo sapiens

<400> 16

Met Asn Gly Phe Ala Ser Leu Leu Arg Arg Asn Gln Phe Ile Leu Leu
1 5 10 15

Val Leu Phe Leu Leu Gln Ile Gln Ser Leu Gly Leu Asp Ile Asp Ser
20 25 30

Arg Pro Thr Ala Glu Val Cys Ala Thr His Thr Ile Ser Pro Gly Pro
35 40 45

Lys Gly Asp Asp Gly Glu Lys Gly Asp Pro Gly Glu Glu Gly Lys His
50 55 60

Gly Lys Val Gly Arg Met Gly Pro Lys Gly Ile Lys Gly Glu Leu Gly
65 70 75 80

Asp Met Gly Asp Arg Gly Asn Ile Gly Lys Thr Gly Pro Ile Gly Lys
85 90 95

Lys Gly Asp Lys Gly Glu Lys Gly Leu Leu Gly Ile Pro Gly Glu Lys
100 105 110

Gly Lys Ala Gly Thr Val Cys Asp Cys Gly Arg Tyr Arg Lys Phe Val
115 120 125

Gly Gln Leu Asp Ile Ser Ile Ala Arg Leu Lys Thr Ser Met Lys Phe
130 135 140

Val Lys Asn Val Ile Ala Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr
145 150 155 160

Tyr Ile Val Gln Glu Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys
165 170 175

Arg Ile Arg Gly Gly Met Leu Ala Met Pro Lys Asp Glu Ala Ala Asn

180

185

190

Thr Leu Ile Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe
195 200 205

Ile Gly Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Met Phe Thr Asp
210 215 220

Asn Thr Pro Leu Gln Asn Tyr Ser Asn Trp Asn Glu Gly Glu Pro Ser
225 230 235 240

Asp Pro Tyr Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly Arg
245 250 255

Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Cys Glu Phe
260 265 270

Ile Lys Lys Lys Lys
275

<210> 17
<211> 742
<212> PRT
<213> Homo sapiens

<400> 17

Met Lys Asp Asp Phe Ala Glu Glu Glu Val Gln Ser Phe Gly Tyr
1 5 10 15

Lys Arg Phe Gly Ile Gln Glu Gly Thr Gln Cys Thr Lys Cys Lys Asn
20 25 30

Asn Trp Ala Leu Lys Phe Ser Ile Ile Leu Leu Tyr Ile Leu Cys Ala
35 40 45

Leu Leu Thr Ile Thr Val Ala Ile Leu Gly Tyr Lys Val Val Glu Lys
50 55 60

Met Asp Asn Val Thr Gly Gly Met Glu Thr Ser Arg Gln Thr Tyr Asp
65 70 75 80

Asp Lys Leu Thr Ala Val Glu Ser Asp Leu Lys Lys Leu Gly Asp Gln
85 90 95

Thr Gly Lys Lys Ala Ile Ser Thr Asn Ser Glu Leu Ser Thr Phe Arg
100 105 110

Ser Asp Ile Leu Asp Leu Arg Gln Gln Leu Arg Glu Ile Thr Glu Lys
115 120 125

Thr Ser Lys Asn Lys Asp Thr Leu Glu Lys Leu Gln Ala Ser Gly Asp
130 135 140

Ala Leu Val Asp Arg Gln Ser Gln Leu Lys Glu Thr Leu Glu Asn Asn
145 150 155 160

Ser Phe Leu Ile Thr Thr Val Asn Lys Thr Leu Gln Ala Tyr Asn Gly
165 170 175

Tyr Val Thr Asn Leu Gln Gln Asp Thr Ser Val Leu Gln Gly Asn Leu
180 185 190

Gln Asn Gln Met Tyr Ser His Asn Val Val Ile Met Asn Leu Asn Asn
195 200 205

Leu Asn Leu Thr Gln Val Gln Gln Arg Asn Leu Ile Thr Asn Leu Gln
210 215 220

Arg Ser Val Asp Asp Thr Ser Gln Ala Ile Gln Arg Ile Lys Asn Asp
225 230 235 240

Phe Gln Asn Leu Gln Gln Val Phe Leu Gln Ala Lys Lys Asp Thr Asp
245 250 255

Trp Leu Lys Glu Lys Val Gln Ser Leu Gln Thr Leu Ala Ala Asn Asn
260 265 270

Ser Ala Leu Ala Lys Ala Asn Asn Asp Thr Leu Glu Asp Met Asn Ser
275 280 285

Gln Leu Asn Ser Phe Thr Gly Gln Met Glu Asn Ile Thr Thr Ile Ser
290 295 300

Gln Ala Asn Glu Gln Asn Leu Lys Asp Leu Gln Asp Leu His Lys Asp
305 310 315 320

Ala Glu Asn Arg Thr Ala Ile Lys Phe Asn Gln Leu Glu Glu Arg Phe
325 330 335

Gln Leu Phe Glu Thr Asp Ile Val Asn Ile Ile Ser Asn Ile Ser Tyr
340 345 350

Thr Ala His His Leu Arg Thr Leu Thr Ser Asn Leu Asn Glu Val Arg
355 360 365

Thr Thr Cys Thr Asp Thr Leu Thr Lys His Thr Asp Asp Leu Thr Ser
370 375 380

Leu Asn Asn Thr Leu Ala Asn Ile Arg Leu Asp Ser Val Ser Leu Arg
385 390 395 400

Met Gln Gln Asp Leu Met Arg Ser Arg Leu Asp Thr Glu Val Ala Asn
405 410 415

Leu Ser Val Ile Met Glu Glu Met Lys Leu Val Asp Ser Lys His Gly
420 425 430

Gln Leu Ile Lys Asn Phe Thr Ile Leu Gln Gly Pro Pro Gly Pro Arg
435 440 445

Gly Pro Arg Gly Asp Arg Gly Ser Gln Gly Pro Pro Gly Pro Thr Gly
450 455 460

Asn Lys Gly Gln Lys Gly Glu Lys Gly Glu Pro Gly Pro Pro Gly Pro
465 470 475 480

Ala Gly Glu Arg Gly Pro Ile Gly Pro Ala Gly Pro Pro Gly Glu Arg
485 490 495

Gly Gly Lys Gly Ser Lys Gly Ser Gln Gly Pro Lys Gly Ser Arg Gly
500 505 510

Ser Pro Gly Lys Pro Gly Pro Gln Gly Pro Ser Gly Asp Pro Gly Pro
515 520 525

Pro Gly Pro Pro Gly Lys Glu Gly Leu Pro Gly Pro Gln Gly Pro Pro
530 535 540

Gly Phe Gln Gly Leu Gln Gly Thr Val Gly Glu Pro Gly Val Pro Gly
545 550 555 560

Pro Arg Gly Leu Pro Gly Leu Pro Gly Val Pro Gly Met Pro Gly Pro
565 570 575

Lys Gly Pro Pro Gly Pro Pro Gly Pro Ser Gly Ala Val Val Pro Leu
580 585 590

Ala Leu Gln Asn Glu Pro Thr Pro Ala Pro Glu Asp Asn Gly Cys Pro
595 600 605

Pro His Trp Lys Asn Phe Thr Asp Lys Cys Tyr Tyr Phe Ser Val Glu
610 615 620

Lys Glu Ile Phe Glu Asp Ala Lys Leu Phe Cys Glu Asp Lys Ser Ser
625 630 635 640

His Leu Val Phe Ile Asn Thr Arg Glu Glu Gln Gln Trp Ile Lys Lys
645 650 655

Gln Met Val Gly Arg Glu Ser His Trp Ile Gly Leu Thr Asp Ser Glu
660 665 670

Arg Glu Asn Glu Trp Lys Trp Leu Asp Gly Thr Ser Pro Asp Tyr Lys
675 680 685

Asn Trp Lys Ala Gly Gln Pro Asp Asn Trp Gly His Gly His Gly Pro
690 695 700

Gly Glu Asp Cys Ala Gly Leu Ile Tyr Ala Gly Gln Trp Asn Asp Phe
705 710 715 720

Gln Cys Glu Asp Val Asn Asn Phe Ile Cys Glu Lys Asp Arg Glu Thr
725 730 735

Val Leu Ser Ser Ala Leu
740

<210> 18
<211> 246
<212> PRT
<213> Carassius auratus

<400> 18

Leu Leu Leu Leu Gln Phe Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro
1 5 10 15

Gln Asn Leu Asn Cys Pro Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly
20 25 30

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala
35 40 45

Ile Gly Pro Lys Gly Glu Lys Gly Glu Ser Gly Val Ser Val Gln Gly
50 55 60

Pro Pro Gly Lys Ala Gly Pro Pro Gly Thr Ala Gly Glu Lys Gly Glu
65 70 75 80

Arg Gly Pro Ser Gly Pro Gln Gly Ser Pro Gly Ser Glu Ser Val Leu
85 90 95

Glu Ser Leu Lys Ser Glu Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr
100 105 110

Phe Glu Lys Val Ser Ser Val Cys His Phe Arg Lys Val Gly Gln Lys
115 120 125

Tyr Tyr Ile Thr Asp Gly Val Val Gly Asn Phe Asp Gln Gly Leu Lys
130 135 140

Ser Cys Met Glu Phe Gly Gly Thr Met Val Ser Pro Arg Thr Ser Ala
145 150 155 160

Glu Asn Gln Ala Leu Leu Lys Leu Val Val Ser Ser Gly Leu Gly Ser
165 170 175

Lys Lys Pro Tyr Ile Gly Val Thr Asp Arg Lys Thr Glu Gly Gln Phe
180 185 190

Val Asp Thr Glu Gly Lys Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly
195 200 205

Gln Pro Asp Asp Tyr Lys Gly Leu Gln Asp Cys Gly Val Ile Glu Asp
210 215 220

Thr Gly Leu Trp Asp Asp Gly Gly Cys Gly Asp Ile Arg Pro Ile Met
225 230 235 240

Cys Glu Ile Asp Ile Lys

<210> 19
<211> 251
<212> PRT
<213> Danio rerio

<400> 19

Met Ala Leu Leu Lys Leu Phe Leu Gly Ala Leu Leu Leu Leu Gln Leu
1 5 10 15

Val Leu Gln Leu Met Ala Gly Ala Ala Asp Pro Gln Ser Leu Asn Cys
20 25 30

Pro Ala Tyr Ala Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Val Gly Arg Asp Gly Ala Asn Gly Pro Lys Gly
50 55 60

Glu Lys Gly Glu Pro Gly Val Asn Val Gln Gly Pro Pro Gly Lys Ala
65 70 75 80

Gly Pro Pro Gly Pro Ala Gly Ala Lys Gly Glu Arg Gly Pro Ser Gly
85 90 95

Leu Pro Gly Gln Asp Cys Met Ser Asp Ser Leu Lys Ser Glu Leu Gln
100 105 110

Lys Leu Ser Asp Lys Ile Ala Leu Ile Glu Lys Val Val Asn Phe Lys
115 120 125

Thr Phe Lys Lys Val Gly Gln Lys Tyr Tyr Val Thr Asp Asp Val Glu
130 135 140

Glu Thr Phe Asp Lys Gly Met Gln Tyr Cys Ser Ser Asn Gly Gly Ala
145 150 155 160

Leu Val Leu Pro Arg Thr Leu Glu Glu Asn Ala Leu Leu Lys Val Phe
165 170 175

Val Ser Ser Ala Phe Lys Arg Leu Phe Ile Arg Ile Thr Asp Arg Glu
180 185 190

Lys Glu Gly Glu Phe Val Asp Thr Asp Arg Lys Lys Leu Thr Phe Thr
195 200 205

Asn Trp Gly Pro Asn Gln Pro Asp Asn Tyr Lys Gly Ala Gln Asp Cys
210 215 220

Gly Ala Ile Ala Asp Ser Gly Leu Trp Asp Asp Val Ser Cys Asp Ser
225 230 235 240

Leu Tyr Pro Ile Ile Cys Glu Ile Glu Ile Lys
245 250

<210> 20
<211> 256
<212> PRT
<213> Cyprinus carpio

<400> 20

Met Ala Leu Phe Lys Leu Phe Leu Gly Thr Leu Leu Leu Gln Phe
1 5 10 15

Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro Gln Asn Leu Asn Cys Pro
20 25 30

Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala Ile Gly Pro Lys Gly Glu
50 55 60

Lys Gly Glu Ser Gly Val Ser Val Gln Gly Pro Pro Gly Lys Ala Gly
65 70 75 80

Pro Pro Gly Pro Ala Gly Glu Lys Gly Glu Arg Gly Pro Thr Gly Ser
85 90 95

Gln Gly Ser Pro Gly Ser Glu Ser Val Leu Glu Ser Leu Lys Ser Glu
100 105 110

Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr Phe Glu Lys Val Ala Ser
115 120 125

Val Gly His Phe Arg Gln Val Gly Gln Lys Tyr Tyr Ile Thr Asp Gly
130 135 140

Val Val Gly Thr Phe Asp Gln Gly Leu Lys Phe Cys Lys Asp Phe Gly
145 150 155 160

Gly Thr Met Val Phe Pro Arg Thr Ser Ala Glu Asn Gln Ala Leu Leu
165 170 175

Lys Leu Val Val Ser Ser Gly Leu Ser Ser Lys Lys Pro Tyr Ile Gly
180 185 190

Val Thr Asp Arg Glu Thr Glu Gly Arg Phe Val Asn Thr Glu Gly Lys
195 200 205

Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly Gln Pro Asp Asp Tyr Lys
210 215 220

Gly Leu Gln Asp Cys Gly Val Ile Glu Asp Ser Gly Leu Trp Asp Asp
225 230 235 240

Gly Ser Cys Gly Asp Ile Arg Pro Ile Met Cys Glu Ile Asp Asn Lys
245 250 255

<210> 21
<211> 222
<212> PRT
<213> Gallus gallus

<400> 21

Met Leu Ser Tyr Ser Phe Cys Met Ile Ala Ala Ala Val Ala Leu Leu
1 5 10 15

Thr Pro Cys His Ala Gln Asn Cys Ala Gly Ala Pro Glu Leu Pro Ser
20 25 30

Ile Pro Gly Val Ser Gly Leu Leu Gly Leu Gly Ala Leu Lys Arg Tyr
35 40 45

Phe Gly Ser Leu Leu Trp Pro Tyr Gly Glu Glu Lys Leu Pro Glu Cys
50 55 60

Gln Trp Leu Gln Arg Gln Gln Asp Leu Ser Thr Ser Ser Asp Asp Glu
65 70 75 80

Leu Gly Asn Val Leu Leu Asn Leu Arg Gln Arg Ile Leu Gln Leu Glu
85 90 95

Gly Val Leu Ala Leu Asp Gly Lys Ile Thr Lys Val Gly Glu Lys Ile
100 105 110

Phe Ala Ser Asn Gly Lys Glu Val Asn Phe Ser Ser Ala Leu Glu Ser
115 120 125

Cys Glu Glu Thr Gly Gly Thr Leu Ala Thr Pro Met Asn Glu Glu Glu
130 135 140

Asn Lys Ala Ile Met Gly Ile Val Lys Gln Tyr Asn Arg Tyr Ala Tyr
145 150 155 160

Leu Gly Ile Lys Glu Ser Asp Thr Ala Gly Gln Phe Lys Tyr Val Asn
165 170 175

Asn Gln Pro Leu Asn Tyr Thr Ser Trp Gln Gln Tyr Glu Pro Asn Gly
180 185 190

Lys Gly Thr Glu Lys Cys Val Glu Met Tyr Thr Asp Gly Asn Trp Lys
195 200 205

Asp Arg Lys Cys Asn Leu Tyr Arg Leu Thr Val Cys Glu Tyr
210 215 220

<210> 22
<211> 244
<212> PRT
<213> Mus musculus

<400> 22

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn

65

70

75

80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 23
<211> 239
<212> PRT
<213> Mus musculus

<400> 23

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 24
<211> 371

<212> PRT

<213> Bos taurus

<400> 24

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Thr Thr Phe Ser Gln Lys Ile Leu Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Leu Glu Ser Gly Leu Pro
35 40 45

Gly His Asp Gly Gln Asp Gly Arg Glu Cys Pro His Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Trp
65 70 75 80

Val Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Phe Val Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys Gly Gly Val
130 135 140

Gly Ala Pro Gly Ile Gln Gly Phe Pro Gly Pro Ser Gly Leu Lys Gly
145 150 155 160

Glu Lys Gly Ala Pro Gly Glu Thr Gly Ala Pro Gly Arg Ala Gly Val
165 170 175

Thr Gly Pro Ser Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Thr Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Lys Gln Arg

210

215

220

Val Thr Ile Leu Asp Gly His Leu Arg Arg Phe Gln Asn Ala Phe Ser
225 230 235 240

Gln Tyr Lys Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu
245 250 255

Lys Ile Phe Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu
260 265 270

Gln Leu Cys Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser
275 280 285

Ala Glu Asn Glu Ala Val Thr Gln Met Val Arg Ala Gln Glu Lys Asn
290 295 300

Ala Tyr Leu Ser Met Asn Asp Ile Ser Thr Glu Gly Arg Phe Thr Tyr
305 310 315 320

Pro Thr Gly Glu Ile Leu Val Tyr Ser Asn Trp Ala Asp Gly Glu Pro
325 330 335

Asn Asn Ser Asp Glu Gly Gln Pro Glu Asn Cys Val Glu Ile Phe Pro
340 345 350

Asp Gly Lys Trp Asn Asp Val Pro Cys Ser Lys Gln Leu Leu Val Ile
355 360 365

Cys Glu Phe
370

<210> 25
<211> 30
<212> PRT
<213> Gallus gallus

<400> 25

Leu Leu Thr Cys Asp Lys Pro Glu Glu Lys Met Tyr Ser Cys Pro Ile
1 5 10 15

Ile Gln Cys Ser Ala Pro Ala Val Asn Gly Leu Pro Gly Asp
20 25 30

<210> 26
<211> 301
<212> PRT
<213> Bos taurus

<400> 26

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 27
<211> 116
<212> PRT
<213> Sus scrofa

<400> 27

Ala Val Gly Glu Lys Val Phe Ser Thr Asn Gly Gln Ser Val Ala Phe
1 5 10 15

Asp Val Ile Arg Glu Leu Cys Ala Arg Ala Gly Gly Arg Ile Ala Ala
20 25 30

Pro Arg Ser Pro Glu Glu Asn Glu Ala Ile Ala Ser Ile Val Lys Lys
35 40 45

His Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Gly Pro Thr Ala Gly
50 55 60

Asp Phe Phe Tyr Leu Asp Gly Thr Pro Val Asn Tyr Thr Asn Trp Tyr
65 70 75 80

Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Lys Cys Val Glu Met Tyr
85 90 95

Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Gln Gln Tyr Arg Leu Ala
100 105 110

Ile Cys Glu Phe
115

<210> 28
<211> 378
<212> PRT
<213> Sus scrofa

<400> 28

Met Leu Leu Leu Pro Leu Ser Val Leu Ile Leu Leu Thr Gln Pro Pro
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Thr Tyr Ser Gln Arg Ala Val Ala
20 25 30

Asn Ala Cys Ala Leu Val Met Cys Ser Pro Met Glu Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Leu Pro Gly Ala Val Gly Arg Ala Gly Met Pro Gly Leu
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Thr Gly Glu Pro
85 90 95

Gly Ala Lys Gly Asp Ile Gly Pro Cys Gly Pro Pro Gly Pro Pro Gly
100 105 110

Ile Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Gln Gln Gly Asn
115 120 125

Ile Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Leu Gly Met Gln Gly Ser Thr Gly Ala Arg Gly
145 150 155 160

Pro Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Glu Arg Gly Ala
165 170 175

Pro Gly Ser Ala Gly Ala Ala Gly Pro Ala Gly Ala Thr Gly Pro Gln

180

185

190

Gly Pro Ser Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly
195 200 205

Pro Pro Gly Glu Arg Gly Ala Lys Gly Glu Ser Gly Leu Pro Gly Ile
210 215 220

Thr Ala Leu Arg Gln Gln Val Glu Thr Leu Gln Gly Gln Val Gln Arg
225 230 235 240

Leu Gln Lys Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Arg Gly Val Gly Glu Lys Ile Phe Lys Thr Gly Gly Phe Glu Lys
260 265 270

Thr Phe Gln Asp Ala Gln Gln Val Cys Thr Gln Ala Gly Gly Gln Met
275 280 285

Ala Ser Pro Arg Ser Glu Thr Glu Asn Glu Ala Leu Ser Gln Leu Val
290 295 300

Thr Ala Gln Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Ile Lys Thr
305 310 315 320

Glu Gly Asn Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ala Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ser Ser Gly Ala Glu
340 345 350

Asn Cys Val Glu Ile Phe Pro Asn Gly Lys Trp Asn Asp Lys Ala Cys
355 360 365

Gly Glu Leu Arg Leu Val Ile Cys Glu Phe
370 375

<210> 29
<211> 244
<212> PRT
<213> Mus musculus

<400> 29

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 30
<211> 239
<212> PRT
<213> Mus musculus

<400> 30

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly

180

185

190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 31
<211> 301
<212> PRT
<213> Bos taurus

<400> 31

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 32
<211> 2412
<212> PRT
<213> Homo sapiens

<400> 32

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Thr Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Leu Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Thr Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Ala Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln

275

280

285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
610 615 620

Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
625 630 635 640

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg
645 650 655

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
660 665 670

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro Asn Asn Gly Trp Leu Ser
675 680 685

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ala
690 695 700

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly

740

745

750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly
770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
835 840 845

Ser His Ala Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu
850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp
1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
1040 1045 1050

Pro Ile Val Leu Asp Asp Ala Arg Cys Ser Gly His Glu Ser Tyr
1055 1060 1065

Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
1085 1090 1095

Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr
1100 1105 1110

Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
1115 1120 1125

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
1130 1135 1140

Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val
1145 1150 1155

Ala Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
1160 1165 1170

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
1175 1180 1185

Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His

1190

1195

1200

Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
1205 1210 1215

Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp
1220 1225 1230

Thr Trp Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser
1235 1240 1245

Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg
1250 1255 1260

Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp
1265 1270 1275

Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
1280 1285 1290

Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln
1295 1300 1305

Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His
1310 1315 1320

Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His
1325 1330 1335

Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser
1340 1345 1350

Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His
1355 1360 1365

Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val
1370 1375 1380

Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
1385 1390 1395

Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
1400 1405 1410

Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
1415 1420 1425

Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val
1430 1435 1440

Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser
1445 1450 1455

Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
1460 1465 1470

Asp Ala Gly Val Ile Cys Ser Ala Phe Gln Ser Gln Pro Thr Pro
1475 1480 1485

Ser Pro Asp Thr Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser
1490 1495 1500

Glu Ser Thr Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
1505 1510 1515

Arg Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val
1520 1525 1530

Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg
1535 1540 1545

Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
1550 1555 1560

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
1565 1570 1575

Ser Gly His Glu Pro Tyr Leu Trp Ser Cys Pro His Asn Gly Trp
1580 1585 1590

Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
1595 1600 1605

Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp Thr Trp Leu
1610 1615 1620

Thr Thr Asn Leu Pro Ala Leu Thr Val Gly Ser Glu Ser Ser Leu

1625

1630

1635

Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly Arg Val
1640 1645 1650

Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
1655 1660 1665

Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys
1670 1675 1680

Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly
1685 1690 1695

Ser Gly Pro Ile Val Leu Gly Asp Val Arg Cys Ser Gly Asn Glu
1700 1705 1710

Ser Tyr Leu Trp Ser Cys Pro His Lys Gly Trp Leu Thr His Asn
1715 1720 1725

Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Thr Gln
1730 1735 1740

Ile Asn Ser Thr Thr Asp Trp Trp His Pro Thr Thr Thr Thr
1745 1750 1755

Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly Phe Leu Phe Tyr Ala
1760 1765 1770

Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro Ala Tyr Tyr Pro Asn
1775 1780 1785

Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly Tyr Arg
1790 1795 1800

Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu Glu Ala His His Asn
1805 1810 1815

Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp Gly Ser Leu Asn Ser
1820 1825 1830

Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp Thr Arg Gln Ile Phe
1835 1840 1845

Thr Ser Ser Tyr Asn Arg Met Thr Ile His Phe Arg Ser Asp Ile
1850 1855 1860

Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp Tyr Asn Ser Phe Pro
1865 1870 1875

Ser Asp Ala Thr Leu Arg Leu Val Asn Leu Asn Ser Ser Tyr Gly
1880 1885 1890

Leu Cys Ala Gly Arg Val Glu Ile Tyr His Gly Gly Thr Trp Gly
1895 1900 1905

Ala Val Cys Asp Asp Ser Trp Thr Ile Gln Glu Ala Glu Val Val
1910 1915 1920

Cys Arg Gln Leu Gly Cys Gly Arg Ala Val Ser Ala Leu Gly Asn
1925 1930 1935

Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile Thr Leu Asp Asp Val
1940 1945 1950

Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp Gln Cys Arg Asn Arg
1955 1960 1965

Gly Trp Phe Ser His Asn Cys Asn His Arg Glu Asp Ala Gly Val
1970 1975 1980

Ile Cys Ser Gly Asn His Leu Ser Thr Pro Ala Pro Phe Leu Asn
1985 1990 1995

Ile Thr Arg Pro Asn Asn Tyr Ser Cys Gly Gly Phe Leu Ser Gln
2000 2005 2010

Pro Ser Gly Asp Phe Ser Ser Pro Phe Tyr Pro Gly Asn Tyr Pro
2015 2020 2025

Asn Asn Ala Lys Cys Val Trp Asp Ile Glu Val Gln Asn Asn Tyr
2030 2035 2040

Arg Val Thr Val Ile Phe Arg Asp Val Gln Leu Glu Gly Gly Cys
2045 2050 2055

Asn Tyr Asp Tyr Ile Glu Val Phe Asp Gly Pro Tyr Arg Ser Ser

2060

2065

2070

Pro Leu Ile Ala Arg Val Cys Asp Gly Ala Arg Gly Ser Phe Thr
2075 2080 2085

Ser Ser Ser Asn Phe Met Ser Ile Arg Phe Ile Ser Asp His Ser
2090 2095 2100

Ile Thr Arg Arg Gly Phe Arg Ala Glu Tyr Tyr Ser Ser Pro Ser
2105 2110 2115

Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His Met Gln Ala
2120 2125 2130

Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe Ser Ala Ser
2135 2140 2145

Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu Cys Arg Pro
2150 2155 2160

Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro Tyr Ser Gly
2165 2170 2175

Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile Asp Tyr Ser
2180 2185 2190

Asn Leu Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg Arg
2195 2200 2205

Thr Asp Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn Thr
2210 2215 2220

Trp Val Asp Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val Ala
2225 2230 2235

Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly Asn Phe Asp
2240 2245 2250

Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu Tyr Pro Val
2255 2260 2265

Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp Leu Tyr Val
2270 2275 2280

Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe Val
2285 2290 2295

Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser Leu
2300 2305 2310

Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr Tyr
2315 2320 2325

Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg Phe
2330 2335 2340

Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu Arg
2345 2350 2355

Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg Cys
2360 2365 2370

Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser Tyr
2375 2380 2385

Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln Thr
2390 2395 2400

Pro Pro Arg Arg Glu Glu Glu Pro Arg
2405 2410

<210> 33
<211> 277
<212> PRT
<213> Homo sapiens

<400> 33

Met Asn Gly Phe Ala Ser Leu Leu Arg Arg Asn Gln Phe Ile Leu Leu
1 5 10 15

Val Leu Phe Leu Leu Gln Ile Gln Ser Leu Gly Leu Asp Ile Asp Ser
20 25 30

Arg Pro Thr Ala Glu Val Cys Ala Thr His Thr Ile Ser Pro Gly Pro
35 40 45

Lys Gly Asp Asp Gly Glu Lys Gly Asp Pro Gly Glu Glu Gly Lys His
50 55 60

Gly Lys Val Gly Arg Met Gly Pro Lys Gly Ile Lys Gly Glu Leu Gly
65 70 75 80

Asp Met Gly Asp Arg Gly Asn Ile Gly Lys Thr Gly Pro Ile Gly Lys
85 90 95

Lys Gly Asp Lys Gly Glu Lys Gly Leu Leu Gly Ile Pro Gly Glu Lys
100 105 110

Gly Lys Ala Gly Thr Val Cys Asp Cys Gly Arg Tyr Arg Lys Phe Val
115 120 125

Gly Gln Leu Asp Ile Ser Ile Ala Arg Leu Lys Thr Ser Met Lys Phe
130 135 140

Val Lys Asn Val Ile Ala Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr
145 150 155 160

Tyr Ile Val Gln Glu Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys
165 170 175

Arg Ile Arg Gly Gly Met Leu Ala Met Pro Lys Asp Glu Ala Ala Asn
180 185 190

Thr Leu Ile Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe
195 200 205

Ile Gly Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Met Phe Thr Asp
210 215 220

Asn Thr Pro Leu Gln Asn Tyr Ser Asn Trp Asn Glu Gly Glu Pro Ser
225 230 235 240

Asp Pro Tyr Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly Arg
245 250 255

Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Cys Glu Phe
260 265 270

Ile Lys Lys Lys Lys
275

<210> 34
<211> 238
<212> PRT
<213> Gallus gallus

<400> 34

Met Met Ala Thr Ser Leu Leu Thr Thr Asp Lys Pro Glu Glu Lys Met
1 5 10 15

Tyr Ser Cys Pro Ile Ile Gln Cys Ser Ala Pro Ala Val Asn Gly Leu
20 25 30

Pro Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys Gly Asp Pro
35 40 45

Gly Glu Gly Leu Arg Gly Leu Gln Gly Leu Pro Gly Lys Ala Gly Pro
50 55 60

Gln Gly Leu Lys Gly Glu Val Gly Pro Gln Gly Glu Lys Gly Gln Lys
65 70 75 80

Gly Glu Arg Gly Ile Val Val Thr Asp Asp Leu His Arg Gln Ile Thr
85 90 95

Asp Leu Glu Ala Lys Ile Arg Val Leu Glu Asp Asp Leu Ser Arg Tyr
100 105 110

Lys Lys Ala Leu Ser Leu Lys Asp Val Val Asn Ile Gly Lys Lys Met
115 120 125

Phe Val Ser Thr Gly Lys Lys Tyr Asn Phe Glu Lys Gly Lys Ser Leu
130 135 140

Cys Ala Lys Ala Gly Ser Val Leu Ala Ser Pro Arg Asn Glu Ala Glu
145 150 155 160

Asn Thr Ala Leu Lys Asp Leu Ile Asp Pro Ser Ser Gln Ala Tyr Ile
165 170 175

Gly Ile Ser Asp Ala Gln Thr Glu Gly Arg Phe Met Tyr Leu Ser Gly
180 185 190

Gly Pro Leu Thr Tyr Ser Asn Trp Lys Pro Gly Glu Pro Asn Asn His
195 200 205

Lys Asn Glu Asp Cys Ala Val Ile Glu Asp Ser Gly Lys Trp Asn Asp
210 215 220

Leu Asp Cys Ser Asn Ser Asn Ile Phe Ile Ile Cys Glu Leu
225 230 235

<210> 35
<211> 30
<212> PRT
<213> Gallus gallus

<400> 35

Leu Leu Thr Cys Asp Lys Pro Glu Glu Lys Met Tyr Ser Cys Pro Ile
1 5 10 15

Ile Gln Cys Ser Ala Pro Ala Val Asn Gly Leu Pro Gly Asp
20 25 30

<210> 36
<211> 60
<212> PRT
<213> Bos taurus

<400> 36

Ala Glu Met Thr Thr Phe Ser Gln Lys Ile Leu Ala Asn Ala Cys Thr
1 5 10 15

Leu Val Met Cys Ser Pro Leu Glu Ser Gly Leu Pro Gly His Asp Gly
20 25 30

Gln Asp Gly Arg Glu Cys Pro His Gly Glu Lys Gly Asp Pro Gly Ser
35 40 45

Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Trp
50 55 60

<210> 37
<211> 301
<212> PRT
<213> Bos taurus

<220>
<221> MISC_FEATURE
<222> (7)..()
<223> Unknown

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Unknown

<400> 37

Glu Glu Met Asp Val Tyr Xaa Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 38
<211> 244
<212> PRT
<213> Mus musculus

<400> 38

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg

100

105

110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 39
<211> 239
<212> PRT
<213> Mus musculus

<400> 39

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 40
<211> 15
<212> PRT
<213> Homo sapiens

<400> 40

Cys Arg Ala Leu Ile Lys Arg Ile Gln Ala Met Ile Pro Lys Gly
1 5 10 15

<210> 41
<211> 374
<212> PRT
<213> Mus musculus

<400> 41

Met Leu Pro Phe Leu Ser Met Leu Val Leu Leu Val Gln Pro Leu Gly
1 5 10 15

Asn Leu Gly Ala Glu Met Lys Ser Leu Ser Gln Arg Ser Val Pro Asn
20 25 30

Thr Cys Thr Leu Val Met Cys Ser Pro Thr Glu Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly Asp
50 55 60

Pro Gly Leu Pro Gly Pro Met Gly Leu Ser Gly Leu Gln Gly Pro Thr
65 70 75 80

Gly Pro Val Gly Pro Lys Gly Glu Asn Gly Ser Ala Gly Glu Pro Gly
85 90 95

Pro Lys Gly Glu Arg Gly Leu Ser Gly Pro Pro Gly Leu Pro Gly Ile
100 105 110

Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Lys Gln Gly Asn Ile
115 120 125

Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys Gly
130 135 140

Glu Val Gly Ala Pro Gly Met Gln Gly Ser Thr Gly Ala Lys Gly Ser
145 150 155 160

Thr Gly Pro Lys Gly Glu Arg Gly Ala Pro Gly Val Gln Gly Ala Pro
165 170 175

Gly Asn Ala Gly Ala Ala Gly Pro Ala Gly Pro Gln Gly
180 185 190

Ala Pro Gly Ser Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Val
195 200 205

Pro Gly Asp Arg Gly Ile Lys Gly Glu Ser Gly Leu Pro Asp Ser Ala
210 215 220

Ala Leu Arg Gln Gln Met Glu Ala Leu Lys Gly Lys Leu Gln Arg Leu
225 230 235 240

Glu Val Ala Phe Ser His Tyr Gln Lys Ala Ala Leu Phe Pro Asp Gly
245 250 255

Arg Ser Val Gly Asp Lys Ile Phe Arg Thr Ala Asp Ser Glu Lys Pro
260 265 270

Phe Glu Asp Ala Gln Glu Met Cys Lys Gln Ala Gly Gly Gln Leu Ala
275 280 285

Ser Pro Arg Ser Ala Thr Glu Asn Ala Ala Ile Gln Gln Leu Ile Thr
290 295 300

Ala His Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Val Gly Thr Glu
305 310 315 320

Gly Lys Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp
325 330 335

Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ala Glu Asn Cys Val Glu
340 345 350

Ile Phe Thr Asn Gly Gln Trp Asn Asp Lys Ala Cys Gly Glu Gln Arg
355 360 365

Leu Val Ile Cys Glu Phe
370

<210> 42
<211> 248
<212> PRT
<213> Canis familiaris

<400> 42

Met Trp Leu Arg Cys Leu Ala Leu Ala Leu Thr Leu Leu Met Val Ser
1 5 10 15

Gly Ile Glu Asn Asn Thr Lys Asp Val Cys Val Gly Asn Pro Gly Ile

20

25

30

Pro Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp
35 40 45

Gly Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Leu Gly Pro Pro Gly
50 55 60

Gly Met Pro Gly His Pro Gly Pro Asn Gly Met Thr Gly Ala Pro Gly
65 70 75 80

Val Ala Gly Glu Arg Gly Glu Lys Gly Glu Pro Gly Glu Arg Gly Pro
85 90 95

Pro Gly Leu Pro Ala Ser Leu Asp Glu Glu Leu Gln Thr Thr Leu His
100 105 110

Asp Leu Arg His Gln Ile Leu Gln Thr Met Gly Val Leu Ser Leu His
115 120 125

Glu Ser Leu Leu Val Val Gly Arg Lys Val Phe Ser Ser Asn Ala Gln
130 135 140

Ser Ile Asn Phe Asn Asp Ile Gln Glu Leu Cys Ala Gly Ala Gly
145 150 155 160

Gln Ile Ala Ala Pro Met Ser Pro Glu Glu Asn Glu Ala Val Ala Ser
165 170 175

Ile Val Lys Lys Tyr Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Ser
180 185 190

Pro Asp Ser Gly Asp Phe Gln Tyr Met Asp Gly Ala Pro Val Asn Tyr
195 200 205

Thr Asn Trp Tyr Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Gln Cys
210 215 220

Val Glu Met Tyr Thr Asp Gly Gln Trp Asn Asn Lys Asn Cys Leu Gln
225 230 235 240

Tyr Arg Leu Ala Ile Cys Glu Phe
245

<210> 43
<211> 375
<212> PRT
<213> Homo sapiens

<400> 43

Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu
1 5 10 15

Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Met Pro
20 25 30

Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly
100 105 110

Val Pro Gly Pro Ala Gly Arg Glu Gly Ala Leu Gly Lys Gln Gly Asn
115 120 125

Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly
145 150 155 160

Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val
165 170 175

Pro Gly Asn Thr Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln
180 185 190

Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly
195 200 205

Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val
210 215 220

Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His
225 230 235 240

Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys
260 265 270

Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gln Leu
275 280 285

Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Ala Leu Gln Gln Leu Val
290 295 300

Val Ala Lys Asn Glu Ala Ala Phe Leu Ser Met Thr Asp Ser Lys Thr
305 310 315 320

Glu Gly Lys Phe Thr Tyr Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asp Asp Gly Gly Ser Glu Asp Cys Val
340 345 350

Glu Ile Phe Thr Asn Gly Lys Trp Asn Asp Arg Ala Cys Gly Glu Lys
355 360 365

Arg Leu Val Val Cys Glu Phe
370 375

<210> 44
<211> 247
<212> PRT
<213> Oryctolagus cuniculus

<400> 44

Met Leu Leu Leu Ser Leu Ala Leu Thr Leu Ile Ser Ala Pro Ala Ser
1 5 10 15

Asp Thr Cys Asp Thr Lys Asp Val Cys Ile Gly Ser Pro Gly Ile Pro

20

25

30

Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
35 40 45

Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Gly
50 55 60

Met Pro Gly Leu Pro Gly Arg Asp Gly Leu Ile Gly Ala Pro Gly Val
65 70 75 80

Pro Gly Glu Arg Gly Asp Lys Gly Glu Pro Gly Glu Arg Gly Pro Pro
85 90 95

Gly Leu Pro Ala Tyr Leu Asp Glu Glu Leu Gln Ala Thr Leu His Glu
100 105 110

Leu Arg His His Ala Leu Gln Ser Ile Gly Val Leu Ser Leu Gln Gly
115 120 125

Ser Met Lys Ala Val Gly Glu Lys Ile Phe Ser Thr Asn Gly Gln Ser
130 135 140

Val Asn Phe Asp Ala Ile Arg Glu Val Cys Ala Arg Ala Gly Gly Arg
145 150 155 160

Ile Ala Val Pro Arg Ser Leu Glu Glu Asn Glu Ala Ile Ala Ser Ile
165 170 175

Val Lys Glu Arg Asn Thr Tyr Ala Tyr Leu Gly Leu Ala Glu Gly Pro
180 185 190

Thr Ala Gly Asp Phe Tyr Tyr Leu Asp Gly Asp Pro Val Asn Tyr Thr
195 200 205

Asn Trp Tyr Pro Gly Glu Pro Arg Gly Gln Gly Arg Glu Lys Cys Val
210 215 220

Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Lys Asn Cys Leu Gln Tyr
225 230 235 240

Arg Leu Val Ile Cys Glu Phe
245

<210> 45
<211> 374
<212> PRT
<213> Mus musculus

<400> 45

Met Leu Pro Phe Leu Ser Met Leu Val Leu Leu Val Gln Pro Leu Gly
1 5 10 15

Asn Leu Gly Ala Glu Met Lys Ser Leu Ser Gln Arg Ser Val Pro Asn
20 25 30

Thr Cys Thr Leu Val Met Cys Ser Pro Thr Glu Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly Asp
50 55 60

Pro Gly Leu Pro Gly Pro Met Gly Leu Ser Gly Leu Gln Gly Pro Thr
65 70 75 80

Gly Pro Val Gly Pro Lys Gly Glu Asn Gly Ser Ala Gly Glu Pro Gly
85 90 95

Pro Lys Gly Glu Arg Gly Leu Ser Gly Pro Pro Gly Leu Pro Gly Ile
100 105 110

Pro Gly Pro Ala Gly Lys Gly Pro Ser Gly Lys Gln Gly Asn Ile
115 120 125

Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys Gly
130 135 140

Glu Val Gly Ala Pro Gly Met Gln Gly Ser Thr Gly Ala Lys Gly Ser
145 150 155 160

Thr Gly Pro Lys Gly Glu Arg Gly Ala Pro Gly Val Gln Gly Ala Pro
165 170 175

Gly Asn Ala Gly Ala Ala Gly Pro Ala Gly Pro Ala Gly Pro Gln Gly
180 185 190

Ala Pro Gly Ser Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Val
195 200 205

Pro Gly Asp Arg Gly Ile Lys Gly Glu Ser Gly Leu Pro Asp Ser Ala
210 215 220

Ala Leu Arg Gln Gln Met Glu Ala Leu Lys Gly Lys Leu Gln Arg Leu
225 230 235 240

Glu Val Ala Phe Ser His Tyr Gln Lys Ala Ala Leu Phe Pro Asp Gly
245 250 255

Arg Ser Val Gly Asp Lys Ile Phe Arg Thr Ala Asp Ser Glu Lys Pro
260 265 270

Phe Glu Asp Ala Gln Glu Met Cys Lys Gln Ala Gly Gly Gln Leu Ala
275 280 285

Ser Pro Arg Ser Ala Thr Glu Asn Ala Ala Ile Gln Gln Leu Ile Thr
290 295 300

Ala His Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Val Gly Thr Glu
305 310 315 320

Gly Lys Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp
325 330 335

Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ala Glu Asn Cys Val Glu
340 345 350

Ile Phe Thr Asn Gly Gln Trp Asn Asp Lys Ala Cys Gly Glu Gln Arg
355 360 365

Leu Val Ile Cys Glu Phe
370

<210> 46
<211> 158
<212> PRT
<213> Homo sapiens

<400> 46

Glu Ala Glu Ala Gly Ser Val Ala Ser Leu Arg Gln Gln Val Glu Ala
1 5 10 15

Leu Gln Gly Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys

20

25

30

Lys Val Glu Leu Phe Pro Asn Gly Gln Ser Val Gly Glu Lys Ile Phe
35 40 45

Lys Thr Ala Gly Phe Val Lys Pro Phe Thr Glu Ala Gln Leu Leu Cys
50 55 60

Thr Gln Ala Gly Gly Gln Leu Ala Ser Pro Arg Ser Ala Ala Glu Asn
65 70 75 80

Ala Ala Leu Gln Gln Leu Val Val Ala Lys Asn Glu Ala Ala Phe Leu
85 90 95

Ser Met Thr Asp Ser Lys Thr Glu Gly Lys Phe Thr Tyr Pro Thr Gly
100 105 110

Glu Ser Leu Val Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asp Asp
115 120 125

Gly Gly Ser Glu Asp Cys Val Glu Ile Phe Thr Asn Gly Lys Trp Asn
130 135 140

Asp Arg Ala Cys Gly Glu Lys Arg Leu Val Val Cys Glu Phe
145 150 155

<210> 47
<211> 158
<212> PRT
<213> Homo sapiens

<400> 47

Glu Ala Glu Ala Gly Ser Val Ala Ser Leu Arg Gln Gln Val Glu Ala
1 5 10 15

Leu Gln Gly Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys
20 25 30

Lys Val Glu Leu Phe Pro Asn Gly Gln Ser Val Gly Glu Lys Ile Phe
35 40 45

Lys Thr Ala Gly Phe Val Lys Pro Phe Thr Glu Ala Gln Leu Leu Cys
50 55 60

Thr Gln Ala Gly Gly Gln Leu Ala Ser Pro Arg Ser Ala Ala Glu Asn
65 70 75 80

Ala Ala Leu Gln Gln Leu Val Val Ala Lys Asn Glu Ala Ala Phe Leu
85 90 95

Ser Met Thr Asp Ser Lys Thr Glu Gly Lys Phe Thr Tyr Pro Thr Gly
100 105 110

Glu Ser Leu Val Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asp Asp
115 120 125

Gly Gly Ser Glu Asp Cys Val Glu Ile Phe Thr Asn Gly Lys Trp Asn
130 135 140

Asp Arg Ala Cys Gly Glu Lys Arg Leu Val Val Cys Glu Phe
145 150 155

<210> 48
<211> 158
<212> PRT
<213> Homo sapiens

<400> 48

Glu Ala Glu Ala Gly Ser Val Ala Ser Leu Arg Gln Gln Val Glu Ala
1 5 10 15

Leu Gln Gly Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys
20 25 30

Lys Val Glu Leu Phe Pro Asn Gly Gln Ser Val Gly Glu Lys Ile Phe
35 40 45

Lys Thr Ala Gly Phe Val Lys Pro Phe Thr Glu Ala Gln Leu Leu Cys
50 55 60

Thr Gln Ala Gly Gly Gln Leu Ala Ser Pro Arg Ser Ala Ala Glu Asn
65 70 75 80

Ala Ala Leu Gln Gln Leu Val Val Ala Lys Asn Glu Ala Ala Phe Leu
85 90 95

Ser Met Thr Asp Ser Lys Thr Glu Gly Lys Phe Thr Tyr Pro Thr Gly
100 105 110

Glu Ser Leu Val Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asp Asp
115 120 125

Gly Gly Ser Glu Asp Cys Val Glu Ile Phe Thr Asn Gly Lys Trp Asn
130 135 140

Asp Arg Ala Cys Gly Glu Lys Arg Leu Val Val Cys Glu Phe
145 150 155

<210> 49
<211> 2403
<212> PRT
<213> Homo sapiens

<400> 49

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Thr Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Leu Thr Leu Glu Ser Thr Ala Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Leu Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
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Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Asp
450 455 460

Thr Leu Pro Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser
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Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg
485 490 495

Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
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Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly
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Trp Ala Met Leu Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
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Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu
545 550 555 560

Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His Ser
565 570 575

Glu Asp Ala Gly Val Ile Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu
580 585 590

Gly Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu
595 600 605

Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn
610 615 620

Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
625 630 635 640

Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu
645 650 655

Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro
660 665 670

Asn Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
675 680 685

Val Ile Cys Ser Ala Ala Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr
690 695 700

Leu Ser Thr Ile Thr Leu Pro Pro Ser Thr Val Gly Ser Glu Ser Ser
705 710 715 720

Leu Thr Leu Arg Leu Val Asn Gly Ser Asp Arg Cys Gln Gly Arg Val
725 730 735

Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp
740 745 750

Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp
755 760 765

Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro
770 775 780

Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp
785 790 795 800

Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
805 810 815

Asp Ala Gly Val Ile Cys Ser Val Ser Gln Ser Arg Pro Thr Pro Ser
820 825 830

Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser
835 840 845

Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg
850 855 860

Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
865 870 875 880

Trp Asp Thr Ser Asp Ala Asn Val Val Cys Arg Arg Leu Gly Cys Gly
885 890 895

Trp Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
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Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu
915 920 925

Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gln His Ser
930 935 940

Glu Asp Ala Gly Val Ile Cys Ser Ala Ala His Ser Trp Ser Thr Pro
945 950 955 960

Ser Pro Asp Thr Leu Pro Thr Ile Thr Leu Pro Ala Ser Thr Val Gly
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Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
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Gln Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys
995 1000 1005

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Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser
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Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg
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Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr
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Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro
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Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu
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Trp Ser Cys Pro His Asp Gly Trp Leu Ser His Asn Cys Gly His
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His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Gln Pro
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Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr Ala
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Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn
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Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val
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Trp Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu
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Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr
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Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu
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Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn
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Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln
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Gly Gly Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Gln Gly
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Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala
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Pro Gly Asn Ala Gln Phe Gly Gln Gly Ser Gly Pro Ile Val Leu
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Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys
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Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp
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Ala Gly Val Ile Cys Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg
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Pro Asp Thr Trp Leu Thr Asn Leu Pro Ala Leu Thr Val Gly
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Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg
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Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr
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Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
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Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala
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Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg
1685 1690 1695

Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Lys Gly
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Trp Leu Thr His Asn Cys Gly His His Glu Asp Ala Gly Val Ile
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Cys Ser Ala Thr Gln Ile Asn Ser Thr Thr Thr Asp Trp Trp His
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Pro Thr Thr Thr Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly
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Phe Leu Phe Tyr Ala Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro
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Ala Tyr Tyr Pro Asn Asn Ala Lys Cys Val Trp Glu Ile Glu Val
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Asn Ser Gly Tyr Arg Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu
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Glu Ala His His Asn Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp
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Gly Ser Leu Asn Ser Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp
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Thr Arg Gln Ile Phe Thr Ser Ser Tyr Asn Arg Met Thr Ile His
1835 1840 1845

Phe Arg Ser Asp Ile Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp
1850 1855 1860

Tyr Asn Ser Phe Pro Ser Asp Ala Thr Leu Arg Leu Val Asn Leu
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Asn Ser Ser Tyr Gly Leu Cys Ala Gly Arg Val Glu Ile Tyr His
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Gly Gly Thr Trp Gly Thr Val Cys Asp Asp Ser Trp Thr Ile Gln
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Ser Ala Leu Gly Asn Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile
1925 1930 1935

Thr Leu Asp Asp Val Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp
1940 1945 1950

Gln Cys Arg Asn Arg Gly Trp Phe Ser His Asn Cys Asn His Arg
1955 1960 1965

Glu Asp Ala Gly Val Ile Cys Ser Gly Asn His Leu Ser Thr Pro
1970 1975 1980

Ala Pro Phe Leu Asn Ile Thr Arg Pro Asn Thr Asp Tyr Ser Cys
1985 1990 1995

Gly Gly Phe Leu Ser Gln Pro Ser Gly Asp Phe Ser Ser Pro Phe
2000 2005 2010

Tyr Pro Gly Asn Tyr Pro Asn Asn Ala Lys Cys Val Trp Asp Ile
2015 2020 2025

Glu Val Gln Asn Asn Tyr Arg Val Thr Val Ile Phe Arg Asp Val
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Gln Leu Glu Gly Gly Cys Asn Tyr Asp Tyr Ile Glu Val Phe Asp
2045 2050 2055

Gly Pro Tyr Arg Ser Ser Pro Leu Ile Ala Arg Val Cys Asp Gly
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Ala Arg Gly Ser Phe Thr Ser Ser Ser Asn Phe Met Ser Ile Arg
2075 2080 2085

Phe Ile Ser Asp His Ser Ile Thr Arg Arg Gly Phe Arg Ala Glu
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Tyr Tyr Ser Ser Pro Ser Asn Asp Ser Thr Asn Leu Leu Cys Leu
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Gln Tyr Gly Asn Phe Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser
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Ser Phe Leu Tyr Pro Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu
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Asn Gln Asp Leu Tyr Val Gln Ala Glu Ile Leu His Ser Asp Ala
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Val Leu Thr Leu Phe Val Asp Thr Cys Val Ala Ser Pro Tyr Ser
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Asn Asp Phe Thr Ser Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys
2300 2305 2310

Val Arg Asp Asp Thr Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg
2315 2320 2325

Ile Ala Arg Phe Arg Phe Arg Ala Phe His Phe Leu Asn Arg Phe
2330 2335 2340

Pro Ser Val Tyr Leu Arg Cys Lys Met Val Val Cys Arg Ala Tyr
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Asp Pro Ser Ser Arg Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys
2360 2365 2370

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<400> 50

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Leu Ile Pro Ser Glu Val Pro Leu Asp Gln Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Ser Thr Leu Glu Ser Thr Ala Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly

180

185

190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
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Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
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Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
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Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
610 615 620

Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
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Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg

645

650

655

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
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Gly His Glu Ser Tyr Leu Trp Ser Cys Pro Asn Asn Gly Trp Leu Ser
675 680 685

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ala
690 695 700

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
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Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
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Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
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Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
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Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
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Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
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Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
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Thr Asn Asp Ala Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp
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Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
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Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr
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Pro Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
1085 1090 1095

Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr

1100

1105

1110

Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
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Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val
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Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
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Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
1175 1180 1185

Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His
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Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
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Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp
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Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln
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Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His
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Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His
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Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser
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Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val
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Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
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Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
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Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
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Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val
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Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser
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Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
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Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro
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Ser Pro Asp Thr Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser
1490 1495 1500

Glu Ser Thr Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
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Arg Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val
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Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg

1535

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1545

Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
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Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
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Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp
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Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
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Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp Thr Trp Leu
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Thr Thr Asn Leu Pro Ala Leu Thr Val Gly Ser Glu Ser Ser Leu
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Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly Arg Val
1640 1645 1650

Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
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Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys
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Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly
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Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly Asn Glu
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Ser Tyr Leu Trp Ser Cys Pro His Lys Gly Trp Leu Thr His Asn
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Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Thr Gln
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Ile Asn Ser Thr Thr Asp Trp Trp His Pro Thr Thr Thr Thr
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Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly Phe Leu Phe Tyr Ala
1760 1765 1770

Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro Ala Tyr Tyr Pro Asn
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Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly Tyr Arg
1790 1795 1800

Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu Glu Ala His His Asn
1805 1810 1815

Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp Gly Ser Leu Asn Ser
1820 1825 1830

Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp Thr Arg Gln Ile Phe
1835 1840 1845

Thr Ser Ser Tyr Asn Arg Met Thr Ile His Phe Arg Ser Asp Ile
1850 1855 1860

Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp Tyr Asn Ser Phe Pro
1865 1870 1875

Ser Asp Ala Thr Leu Arg Leu Val Asn Leu Asn Ser Ser Tyr Gly
1880 1885 1890

Leu Cys Ala Gly Arg Val Glu Ile Tyr His Gly Gly Thr Trp Gly
1895 1900 1905

Thr Val Cys Asp Asp Ser Trp Thr Ile Gln Glu Ala Glu Val Val
1910 1915 1920

Cys Arg Gln Leu Gly Cys Gly Arg Ala Val Ser Ala Leu Gly Asn
1925 1930 1935

Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile Thr Leu Asp Asp Val
1940 1945 1950

Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp Gln Cys Arg Asn Arg
1955 1960 1965

Gly Trp Phe Ser His Asn Cys Asn His Arg Glu Asp Ala Gly Val

1970

1975

1980

Ile Cys Ser Gly Asn His Leu Ser Thr Pro Ala Pro Phe Leu Asn
1985 1990 1995

Ile Thr Arg Pro Asn Thr Asp Tyr Ser Cys Gly Gly Phe Leu Ser
2000 2005 2010

Gln Pro Ser Gly Asp Phe Ser Ser Pro Phe Tyr Pro Gly Asn Tyr
2015 2020 2025

Pro Asn Asn Ala Lys Cys Val Trp Asp Ile Glu Val Gln Asn Asn
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Tyr Arg Val Thr Val Ile Phe Arg Asp Val Gln Leu Glu Gly Gly
2045 2050 2055

Cys Asn Tyr Asp Tyr Ile Glu Val Phe Asp Gly Pro Tyr Arg Ser
2060 2065 2070

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Thr Ser Ser Ser Asn Phe Met Ser Ile Arg Phe Ile Ser Asp His
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Ser Asn Phe Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg
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Arg Thr Asp Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn
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Thr Trp Val Asp Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val
2225 2230 2235

Ala Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly Asn Phe
2240 2245 2250

Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu Tyr Pro
2255 2260 2265

Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp Leu Tyr
2270 2275 2280

Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe
2285 2290 2295

Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser
2300 2305 2310

Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr
2315 2320 2325

Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg
2330 2335 2340

Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu
2345 2350 2355

Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg
2360 2365 2370

Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser
2375 2380 2385

Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln
2390 2395 2400

Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg

2405

2410

<210> 51
<211> 1785
<212> PRT
<213> Homo sapiens

<400> 51

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Gln Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Ser Thr Leu Glu Ser Thr Ala Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Gln
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp Ala Met Ser Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly His Glu Ser Tyr Pro Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Ala Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro
595 600 605

Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg
610 615 620

Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr
625 630 635 640

Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
645 650 655

Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala
660 665 670

Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp
675 680 685

Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His
690 695 700

Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val
705 710 715 720

Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr Trp
725 730 735

Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu
740 745 750

Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu
755 760 765

Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn
770 775 780

Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
785 790 795 800

Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu
805 810 815

Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro
820 825 830

His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
835 840 845

Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr
850 855 860

Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser Glu Ser Thr Leu Ala
865 870 875 880

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly Arg Val Glu Val
885 890 895

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr
900 905 910

Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met
915 920 925

Ser Ala Pro Gly Asn Ala Gln Phe Gly Gln Gly Ser Gly Pro Ile Val
930 935 940

Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys
945 950 955 960

Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala
965 970 975

Gly Val Ile Cys Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp
980 985 990

Thr Trp Leu Thr Thr Asn Leu Pro Ala Leu Thr Val Gly Ser Glu Ser
995 1000 1005

Ser Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly
1010 1015 1020

Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
1025 1030 1035

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu
1040 1045 1050

Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly
1055 1060 1065

Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly
1070 1075 1080

Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Lys Gly Trp Leu Thr
1085 1090 1095

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala
1100 1105 1110

Thr Gln Ile Asn Ser Thr Thr Thr Asp Trp Trp His Pro Thr Thr
1115 1120 1125

Thr Thr Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly Phe Leu Phe
1130 1135 1140

Tyr Ala Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro Ala Tyr Tyr
1145 1150 1155

Pro Asn Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly
1160 1165 1170

Tyr Arg Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu Glu Ala His
1175 1180 1185

His Asn Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp Gly Ser Leu
1190 1195 1200

Asn Ser Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp Thr Arg Gln
1205 1210 1215

Ile Phe Thr Ser Ser Tyr Asn Arg Met Thr Ile His Phe Arg Ser
1220 1225 1230

Asp Ile Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp Tyr Asn Ser
1235 1240 1245

Phe Pro Ser Asp Ala Thr Leu Arg Leu Val Asn Leu Asn Ser Ser
1250 1255 1260

Tyr Gly Leu Cys Ala Gly Arg Val Glu Ile Tyr His Gly Gly Thr
1265 1270 1275

Trp Gly Thr Val Cys Asp Asp Ser Trp Thr Ile Gln Glu Ala Glu
1280 1285 1290

Val Val Cys Arg Gln Leu Gly Cys Gly Arg Ala Val Ser Ala Leu
1295 1300 1305

Gly Asn Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile Thr Leu Asp
1310 1315 1320

Asp Val Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp Gln Cys Arg
1325 1330 1335

Asn Arg Gly Trp Phe Ser His Asn Cys Asn His Arg Glu Asp Ala
1340 1345 1350

Gly Val Ile Cys Ser Gly Asn His Leu Ser Thr Pro Ala Pro Phe
1355 1360 1365

Leu Asn Ile Thr Arg Pro Asn Thr Asp Tyr Ser Cys Gly Gly Phe
1370 1375 1380

Leu Ser Gln Pro Ser Gly Asp Phe Ser Ser Pro Phe Tyr Pro Gly
1385 1390 1395

Asn Tyr Pro Asn Asn Ala Lys Cys Val Trp Asp Ile Glu Val Gln
1400 1405 1410

Asn Asn Tyr Arg Val Thr Val Ile Phe Arg Asp Val Gln Leu Glu
1415 1420 1425

Gly Gly Cys Asn Tyr Asp Tyr Ile Glu Val Phe Asp Gly Pro Tyr
1430 1435 1440

Arg Ser Ser Pro Leu Ile Ala Arg Val Cys Asp Gly Ala Arg Gly
1445 1450 1455

Ser Phe Thr Ser Ser Asn Phe Met Ser Ile Arg Phe Ile Ser
1460 1465 1470

Asp His Ser Ile Thr Arg Arg Gly Phe Arg Ala Glu Tyr Tyr Ser
1475 1480 1485

Ser Pro Ser Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His
1490 1495 1500

Met Gln Ala Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe
1505 1510 1515

Ser Ala Ser Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu
1520 1525 1530

Cys Arg Pro Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro
1535 1540 1545

Tyr Ser Gly Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile
1550 1555 1560

Asp Tyr Ser Asn Phe Leu Thr Ala Ala Val Ser Gly Gly Ile Ile
1565 1570 1575

Lys Arg Arg Thr Asp Leu Arg Ile His Val Ser Cys Arg Met Leu
1580 1585 1590

Gln Asn Thr Trp Val Asp Thr Met Tyr Ile Ala Asn Asp Thr Ile
1595 1600 1605

His Val Ala Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly
1610 1615 1620

Asn Phe Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu
1625 1630 1635

Tyr Pro Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp
1640 1645 1650

Leu Tyr Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr
1655 1660 1665

Leu Phe Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe
1670 1675 1680

Thr Ser Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp
1685 1690 1695

Asp Thr Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg
1700 1705 1710

Phe Arg Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val
1715 1720 1725

Tyr Leu Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser
1730 1735 1740

Ser Arg Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val
1745 1750 1755

Gly Ser Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln
1760 1765 1770

Leu Gln Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg
1775 1780 1785

<210> 52
<211> 34
<212> PRT
<213> Bos taurus

<400> 52

Leu Ile Pro Cys Cys Pro Val Asn Ile Lys Arg Leu Leu Ile Val Val
1 5 10 15

Val Val Val Val Leu Leu Val Val Val Ile Val Gly Ala Leu Leu Met
20 25 30

Gly Leu

<210> 53
<211> 35
<212> PRT
<213> Canis familiaris

<400> 53

Leu Gly Ile Pro Cys Phe Pro Ser Ser Leu Lys Arg Leu Leu Ile Ile
1 5 10 15

Val Val Val Ile Val Leu Val Val Val Val Ile Val Gly Ala Leu Leu
20 25 30

Met Gly Leu
35

<210> 54
<211> 371
<212> PRT
<213> Bos taurus

<400> 54

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Thr Thr Phe Ser Gln Lys Ile Leu Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Leu Glu Ser Gly Leu Pro
35 40 45

Gly His Asp Gly Gln Asp Gly Arg Glu Cys Pro His Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Arg Pro Gly Trp
65 70 75 80

Val Gly Pro Ile Gly Pro Lys Gly Asp Asn Gly Phe Val Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys Gly Gly Val
130 135 140

Gly Ala Pro Gly Ile Gln Gly Phe Pro Gly Pro Ser Gly Leu Lys Gly
145 150 155 160

Glu Lys Gly Ala Pro Gly Glu Thr Gly Ala Pro Gly Arg Ala Gly Val
165 170 175

Thr Gly Pro Ser Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Glu Thr Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Lys Gln Arg
210 215 220

Val Thr Ile Leu Asp Gly His Leu Arg Arg Phe Gln Asn Ala Phe Ser
225 230 235 240

Gln Tyr Lys Lys Ala Val Leu Phe Pro Asp Gly Gln Ala Val Gly Glu
245 250 255

Lys Ile Phe Lys Thr Ala Gly Ala Val Lys Ser Tyr Ser Asp Ala Glu

260

265

270

Gln Leu Cys Arg Glu Ala Lys Gly Gln Leu Ala Ser Pro Arg Ser Ser
275 280 285

Ala Glu Asn Glu Ala Val Thr Gln Met Val Arg Ala Gln Glu Lys Asn
290 295 300

Ala Tyr Leu Ser Met Asn Asp Ile Ser Thr Glu Gly Arg Phe Thr Tyr
305 310 315 320

Pro Thr Gly Glu Ile Leu Val Tyr Ser Asn Trp Ala Asp Gly Glu Pro
325 330 335

Asn Asn Ser Asp Glu Gly Gln Pro Glu Asn Cys Val Glu Ile Phe Pro
340 345 350

Asp Gly Lys Trp Asn Asp Val Pro Cys Ser Lys Gln Leu Leu Val Ile
355 360 365

Cys Glu Phe
370

<210> 55
<211> 375
<212> PRT
<213> Homo sapiens

<400> 55

Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu
1 5 10 15

Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Met Pro
20 25 30

Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly
100 105 110

Val Pro Gly Pro Ala Gly Arg Glu Gly Ala Leu Gly Lys Gln Gly Asn
115 120 125

Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly
145 150 155 160

Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val
165 170 175

Pro Gly Asn Thr Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln
180 185 190

Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly
195 200 205

Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val
210 215 220

Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His
225 230 235 240

Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys
260 265 270

Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gly Gln Leu
275 280 285

Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Ala Leu Gln Gln Leu Val
290 295 300

Val Ala Lys Asn Glu Ala Ala Phe Leu Ser Met Thr Asp Ser Lys Thr
305 310 315 320

Glu Gly Lys Phe Thr Tyr Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asp Asp Gly Gly Ser Glu Asp Cys Val
340 345 350

Glu Ile Phe Thr Asn Gly Lys Trp Asn Asp Arg Ala Cys Gly Glu Lys
355 360 365

Arg Leu Val Val Cys Glu Phe
370 375

<210> 56
<211> 197
<212> PRT
<213> Homo sapiens

<400> 56

Met Asp Val Gly Ser Lys Glu Val Leu Met Glu Ser Pro Pro Asp Tyr
1 5 10 15

Ser Ala Ala Pro Arg Gly Arg Phe Gly Ile Pro Cys Cys Pro Val His
20 25 30

Leu Lys Arg Leu Leu Ile Val Val Val Val Val Val Leu Ile Val Val
35 40 45

Val Ile Val Gly Ala Leu Leu Met Gly Leu His Met Ser Gln Lys His
50 55 60

Thr Glu Met Val Leu Glu Met Ser Ile Gly Ala Pro Glu Ala Gln Gln
65 70 75 80

Arg Leu Ala Leu Ser Glu His Leu Val Thr Thr Ala Thr Phe Ser Ile
85 90 95

Gly Ser Thr Gly Leu Val Val Tyr Asp Tyr Gln Gln Leu Leu Ile Ala
100 105 110

Tyr Lys Pro Ala Pro Gly Thr Cys Cys Tyr Ile Met Lys Ile Ala Pro
115 120 125

Glu Ser Ile Pro Ser Leu Glu Ala Leu Asn Arg Lys Val His Asn Phe

130

135

140

Gln Met Glu Cys Ser Leu Gln Ala Lys Pro Ala Val Pro Thr Ser Lys
145 150 155 160

Leu Gly Gln Ala Glu Gly Arg Asp Ala Gly Ser Ala Pro Ser Gly Gly
165 170 175

Asp Pro Ala Phe Leu Gly Met Ala Val Asn Thr Leu Cys Gly Glu Val
180 185 190

Pro Leu Tyr Tyr Ile
195

<210> 57
<211> 248
<212> PRT
<213> Canis familiaris

<400> 57

Met Trp Leu Arg Cys Leu Ala Leu Ala Leu Thr Leu Leu Met Val Ser
1 5 10 15

Gly Ile Glu Asn Asn Thr Lys Asp Val Cys Val Gly Asn Pro Gly Ile
20 25 30

Pro Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp
35 40 45

Gly Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Leu Gly Pro Pro Gly
50 55 60

Gly Met Pro Gly His Pro Gly Pro Asn Gly Met Thr Gly Ala Pro Gly
65 70 75 80

Val Ala Gly Glu Arg Gly Glu Lys Gly Glu Pro Gly Glu Arg Gly Pro
85 90 95

Pro Gly Leu Pro Ala Ser Leu Asp Glu Glu Leu Gln Thr Thr Leu His
100 105 110

Asp Leu Arg His Gln Ile Leu Gln Thr Met Gly Val Leu Ser Leu His
115 120 125

Glu Ser Leu Leu Val Val Gly Arg Lys Val Phe Ser Ser Gly Ala Gln
130 135 140

Ser Ile Asn Phe Asn Asp Ile Gln Glu Leu Cys Ala Gly Ala Gly Gly
145 150 155 160

Gln Ile Ala Ala Pro Met Ser Pro Glu Glu Asn Glu Ala Val Ala Ser
165 170 175

Ile Val Lys Lys Tyr Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Ser
180 185 190

Pro Asp Ser Gly Asp Phe Gln Tyr Met Asp Gly Ala Pro Val Asn Tyr
195 200 205

Thr Asn Trp Tyr Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Gln Cys
210 215 220

Val Glu Met Tyr Thr Asp Gly Gln Trp Asn Asn Lys Asn Cys Leu Gln
225 230 235 240

Tyr Arg Leu Ala Ile Cys Glu Phe
245

<210> 58
<211> 248
<212> PRT
<213> Homo sapiens

<400> 58

Met Trp Leu Cys Pro Leu Ala Leu Asn Leu Ile Leu Met Ala Ala Ser
1 5 10 15

Gly Ala Val Cys Glu Val Lys Asp Val Cys Val Gly Ser Pro Gly Ile
20 25 30

Pro Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg His Gly Arg Asp
35 40 45

Gly Leu Lys Gly Asp Leu Gly Pro Pro Gly Pro Met Gly Pro Pro Gly
50 55 60

Glu Met Pro Cys Pro Pro Gly Asn Asp Gly Leu Pro Gly Ala Pro Gly
65 70 75 80

Ile Pro Gly Glu Cys Gly Glu Lys Gly Glu Pro Gly Glu Arg Gly Pro
85 90 95

Pro Gly Leu Pro Ala His Leu Asp Glu Glu Leu Gln Ala Thr Leu His
100 105 110

Asp Phe Arg His Gln Ile Leu Gln Thr Arg Gly Ala Leu Ser Leu Gln
115 120 125

Gly Ser Ile Met Thr Val Gly Glu Lys Val Phe Ser Ser Asn Gly Gln
130 135 140

Ser Ile Thr Phe Asp Ala Ile Gln Glu Ala Cys Ala Arg Ala Gly Gly
145 150 155 160

Arg Ile Ala Val Pro Arg Asn Pro Glu Glu Asn Glu Ala Ile Ala Ser
165 170 175

Phe Val Lys Lys Tyr Asn Thr Tyr Ala Tyr Val Gly Leu Thr Glu Gly
180 185 190

Pro Ser Pro Gly Asp Phe Arg Tyr Ser Asp Gly Thr Pro Val Asn Tyr
195 200 205

Thr Asn Trp Tyr Arg Gly Glu Pro Ala Gly Arg Gly Lys Glu Gln Cys
210 215 220

Val Glu Met Tyr Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Leu Tyr
225 230 235 240

Ser Arg Leu Thr Ile Cys Glu Phe
245

<210> 59
<211> 301
<212> PRT
<213> Bos taurus

<400> 59

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Asn Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 60
<211> 369
<212> PRT
<213> Bos taurus

<400> 60

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Met Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Pro Glu Asp Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Met Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Leu Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Val
130 135 140

Gly Ala Pro Gly Ile Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
145 150 155 160

Glu Arg Gly Ala Pro Gly Asp Pro Gly Ala Pro Gly Arg Ala Gly Ala
165 170 175

Pro Gly Pro Arg Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Thr Pro Gly Glu Arg Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Arg Gln Arg
210 215 220

Val Gly Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
225 230 235 240

Gln Tyr Lys Lys Ala Met Leu Phe Pro Asn Gly Arg Ser Val Gly Glu
245 250 255

Lys Ile Phe Lys Thr Val Gly Ser Glu Lys Thr Phe Gln Asp Ala Gln
260 265 270

Gln Ile Cys Thr Gln Ala Gly Gly Gln Leu Pro Ser Pro Arg Ser Gly
275 280 285

Ala Glu Asn Glu Ala Leu Thr Gln Leu Ala Thr Ala Gln Asn Lys Ala
290 295 300

Ala Phe Leu Ser Met Ser Asp Thr Arg Lys Glu Gly Thr Phe Ile Tyr
305 310 315 320

Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp Ala Pro Gln Glu Pro
325 330 335

Asn Asn Asp Gly Gly Ser Glu Asn Cys Val Glu Ile Phe Pro Asn Gly
340 345 350

Lys Trp Asn Asp Lys Val Cys Gly Glu Gln Arg Leu Val Ile Cys Glu
355 360 365

Phe

<211> 116
<212> PRT
<213> Sus scrofa

<400> 61

Ala Val Gly Glu Lys Val Phe Ser Thr Asn Gly Gln Ser Val Ala Phe
1 5 10 15

Asp Val Ile Arg Glu Leu Cys Ala Arg Ala Gly Gly Arg Ile Ala Ala
20 25 30

Pro Arg Ser Pro Glu Glu Asn Glu Ala Ile Ala Ser Ile Val Lys Lys
35 40 45

His Asn Thr Tyr Ala Tyr Leu Gly Leu Val Glu Gly Pro Thr Ala Gly
50 55 60

Asp Phe Phe Tyr Leu Asp Gly Thr Pro Val Asn Tyr Thr Asn Trp Tyr
65 70 75 80

Pro Gly Glu Pro Arg Gly Arg Gly Lys Glu Lys Cys Val Glu Met Tyr
85 90 95

Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Gln Gln Tyr Arg Leu Ala
100 105 110

Ile Cys Glu Phe
115

<210> 62
<211> 378
<212> PRT
<213> Sus scrofa

<400> 62

Met Leu Leu Leu Pro Leu Ser Val Leu Ile Leu Leu Thr Gln Pro Pro
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Thr Tyr Ser Gln Arg Ala Val Ala
20 25 30

Asn Ala Cys Ala Leu Val Met Cys Ser Pro Met Glu Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Glu Gly Pro Arg Gly Glu Lys Gly

50

55

60

Asp Pro Gly Leu Pro Gly Ala Val Gly Arg Ala Gly Met Pro Gly Leu
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Thr Gly Glu Pro
85 90 95

Gly Ala Lys Gly Asp Ile Gly Pro Cys Gly Pro Pro Gly Pro Pro Gly
100 105 110

Ile Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Gln Gln Gly Asn
115 120 125

Ile Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Thr Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Leu Gly Met Gln Gly Ser Thr Gly Ala Arg Gly
145 150 155 160

Pro Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Glu Arg Gly Ala
165 170 175

Pro Gly Ser Ala Gly Ala Ala Gly Pro Ala Gly Ala Thr Gly Pro Gln
180 185 190

Gly Pro Ser Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly
195 200 205

Pro Pro Gly Glu Arg Gly Ala Lys Gly Glu Ser Gly Leu Pro Gly Ile
210 215 220

Thr Ala Leu Arg Gln Gln Val Glu Thr Leu Gln Gly Gln Val Gln Arg
225 230 235 240

Leu Gln Lys Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Arg Gly Val Gly Glu Lys Ile Phe Lys Thr Gly Gly Phe Glu Lys
260 265 270

Thr Phe Gln Asp Ala Gln Gln Val Cys Thr Gln Ala Gly Gly Gln Met
275 280 285

Ala Ser Pro Arg Ser Glu Thr Glu Asn Glu Ala Leu Ser Gln Leu Val
290 295 300

Thr Ala Gln Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Ile Lys Thr
305 310 315 320

Glu Gly Asn Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ala Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asn Asn Gly Gly Ser Ser Gly Ala Glu
340 345 350

Asn Cys Val Glu Ile Phe Pro Asn Gly Lys Trp Asn Asp Lys Ala Cys
355 360 365

Gly Glu Leu Arg Leu Val Ile Cys Glu Phe
370 375

<210> 63
<211> 34
<212> PRT
<213> Bos taurus

<400> 63

Leu Ile Pro Cys Cys Pro Val Asn Ile Lys Arg Leu Leu Ile Val Val
1 5 10 15

Val Val Val Val Leu Leu Val Val Ile Val Gly Ala Leu Leu Met
20 25 30

Gly Leu

<210> 64
<211> 369
<212> PRT
<213> Bos taurus

<400> 64

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Met Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Pro Glu Asp Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Met Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Leu Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Val
130 135 140

Gly Ala Pro Gly Ile Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
145 150 155 160

Glu Arg Gly Ala Pro Gly Glu Pro Gly Ala Pro Gly Arg Ala Gly Ala
165 170 175

Pro Gly Pro Ala Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Thr Pro Gly Glu Arg Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Arg Gln Arg
210 215 220

Val Gly Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
225 230 235 240

Gln Tyr Lys Lys Ala Met Leu Phe Pro Asn Gly Arg Ser Val Gly Glu
245 250 255

Lys Ile Phe Lys Thr Val Gly Ser Glu Lys Thr Phe Gln Asp Ala Gln

260

265

270

Gln Ile Cys Thr Gln Ala Gly Gly Gln Leu Pro Ser Pro Arg Ser Gly
275 280 285

Ala Glu Asn Glu Ala Leu Thr Gln Leu Ala Thr Ala Gln Asn Lys Ala
290 295 300

Ala Phe Leu Ser Met Ser Asp Thr Arg Lys Glu Gly Thr Phe Ile Tyr
305 310 315 320

Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp Ala Pro Gln Glu Pro
325 330 335

Asn Asn Asp Gly Gly Ser Glu Asn Cys Val Glu Ile Phe Pro Asn Gly
340 345 350

Lys Trp Asn Asp Lys Val Cys Gly Glu Gln Arg Leu Val Ile Cys Glu
355 360 365

Phe

<210> 65
<211> 301
<212> PRT
<213> Bos taurus

<400> 65

Glu Glu Met Asp Val Tyr Ser Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 66
<211> 2412

<212> PRT

<213> Homo sapiens

<400> 66

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Thr Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Leu Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Thr Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Ala Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro

210

215

220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
610 615 620

Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
625 630 635 640

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg
645 650 655

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
660 665 670

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro Asn Asn Gly Trp Leu Ser

675

680

685

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ala
690 695 700

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly
770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
835 840 845

Ser His Ala Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu
850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp
1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
1040 1045 1050

Pro Ile Val Leu Asp Asp Ala Arg Cys Ser Gly His Glu Ser Tyr
1055 1060 1065

Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
1085 1090 1095

Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr
1100 1105 1110

Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
1115 1120 1125

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp

1130

1135

1140

Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val
1145 1150 1155

Ala Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
1160 1165 1170

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
1175 1180 1185

Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His
1190 1195 1200

Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
1205 1210 1215

Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp
1220 1225 1230

Thr Trp Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser
1235 1240 1245

Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg
1250 1255 1260

Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp
1265 1270 1275

Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
1280 1285 1290

Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln
1295 1300 1305

Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His
1310 1315 1320

Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His
1325 1330 1335

Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser
1340 1345 1350

Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His
1355 1360 1365

Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val
1370 1375 1380

Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
1385 1390 1395

Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
1400 1405 1410

Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
1415 1420 1425

Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val
1430 1435 1440

Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser
1445 1450 1455

Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
1460 1465 1470

Asp Ala Gly Val Ile Cys Ser Ala Phe Gln Ser Gln Pro Thr Pro
1475 1480 1485

Ser Pro Asp Thr Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser
1490 1495 1500

Glu Ser Thr Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
1505 1510 1515

Arg Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val
1520 1525 1530

Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg
1535 1540 1545

Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
1550 1555 1560

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys

1565

1570

1575

Ser Gly His Glu Pro Tyr Leu Trp Ser Cys Pro His Asn Gly Trp
1580 1585 1590

Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
1595 1600 1605

Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp Thr Trp Leu
1610 1615 1620

Thr Thr Asn Leu Pro Ala Leu Thr Val Gly Ser Glu Ser Ser Leu
1625 1630 1635

Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly Arg Val
1640 1645 1650

Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
1655 1660 1665

Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys
1670 1675 1680

Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly
1685 1690 1695

Ser Gly Pro Ile Val Leu Gly Asp Val Arg Cys Ser Gly Asn Glu
1700 1705 1710

Ser Tyr Leu Trp Ser Cys Pro His Lys Gly Trp Leu Thr His Asn
1715 1720 1725

Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Thr Gln
1730 1735 1740

Ile Asn Ser Thr Thr Asp Trp Trp His Pro Thr Thr Thr Thr
1745 1750 1755

Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly Phe Leu Phe Tyr Ala
1760 1765 1770

Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro Ala Tyr Tyr Pro Asn
1775 1780 1785

Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly Tyr Arg
1790 1795 1800

Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu Glu Ala His His Asn
1805 1810 1815

Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp Gly Ser Leu Asn Ser
1820 1825 1830

Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp Thr Arg Gln Ile Phe
1835 1840 1845

Thr Ser Ser Tyr Asn Arg Met Thr Ile His Phe Arg Ser Asp Ile
1850 1855 1860

Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp Tyr Asn Ser Phe Pro
1865 1870 1875

Ser Asp Ala Thr Leu Arg Leu Val Asn Leu Asn Ser Ser Tyr Gly
1880 1885 1890

Leu Cys Ala Gly Arg Val Glu Ile Tyr His Gly Gly Thr Trp Gly
1895 1900 1905

Ala Val Cys Asp Asp Ser Trp Thr Ile Gln Glu Ala Glu Val Val
1910 1915 1920

Cys Arg Gln Leu Gly Cys Gly Arg Ala Val Ser Ala Leu Gly Asn
1925 1930 1935

Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile Thr Leu Asp Asp Val
1940 1945 1950

Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp Gln Cys Arg Asn Arg
1955 1960 1965

Gly Trp Phe Ser His Asn Cys Asn His Arg Glu Asp Ala Gly Val
1970 1975 1980

Ile Cys Ser Gly Asn His Leu Ser Thr Pro Ala Pro Phe Leu Asn
1985 1990 1995

Ile Thr Arg Pro Asn Asn Tyr Ser Cys Gly Gly Phe Leu Ser Gln

2000

2005

2010

Pro Ser Gly Asp Phe Ser Ser Pro Phe Tyr Pro Gly Asn Tyr Pro
2015 2020 2025

Asn Asn Ala Lys Cys Val Trp Asp Ile Glu Val Gln Asn Asn Tyr
2030 2035 2040

Arg Val Thr Val Ile Phe Arg Asp Val Gln Leu Glu Gly Gly Cys
2045 2050 2055

Asn Tyr Asp Tyr Ile Glu Val Phe Asp Gly Pro Tyr Arg Ser Ser
2060 2065 2070

Pro Leu Ile Ala Arg Val Cys Asp Gly Ala Arg Gly Ser Phe Thr
2075 2080 2085

Ser Ser Ser Asn Phe Met Ser Ile Arg Phe Ile Ser Asp His Ser
2090 2095 2100

Ile Thr Arg Arg Gly Phe Arg Ala Glu Tyr Tyr Ser Ser Pro Ser
2105 2110 2115

Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His Met Gln Ala
2120 2125 2130

Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe Ser Ala Ser
2135 2140 2145

Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu Cys Arg Pro
2150 2155 2160

Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro Tyr Ser Gly
2165 2170 2175

Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile Asp Tyr Ser
2180 2185 2190

Asn Leu Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg Arg
2195 2200 2205

Thr Asp Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn Thr
2210 2215 2220

Trp Val Asp Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val Ala
2225 2230 2235

Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly Asn Phe Asp
2240 2245 2250

Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu Tyr Pro Val
2255 2260 2265

Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp Leu Tyr Val
2270 2275 2280

Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe Val
2285 2290 2295

Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser Leu
2300 2305 2310

Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr Tyr
2315 2320 2325

Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg Phe
2330 2335 2340

Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu Arg
2345 2350 2355

Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg Cys
2360 2365 2370

Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser Tyr
2375 2380 2385

Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln Thr
2390 2395 2400

Pro Pro Arg Arg Glu Glu Glu Pro Arg
2405 2410

<210> 67
<211> 2413
<212> PRT
<213> Homo sapiens

<400> 67

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Gln Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Ser Thr Leu Glu Ser Thr Ala Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Léu Arg Leu Val Asn Gly Gly
225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
610 615 620

Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
625 630 635 640

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg
645 650 655

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
660 665 670

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro Asn Asn Gly Trp Leu Ser
675 680 685

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ala
690 695 700

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
835 840 845

Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp
1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
1040 1045 1050

Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr
1055 1060 1065

Pro Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
1085 1090 1095

Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala Ser Thr
1100 1105 1110

Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
1115 1120 1125

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
1130 1135 1140

Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val
1145 1150 1155

Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
1160 1165 1170

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
1175 1180 1185

Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His
1190 1195 1200

Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly
1205 1210 1215

Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro Ser Pro Asp
1220 1225 1230

Thr Trp Pro Thr Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser
1235 1240 1245

Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg
1250 1255 1260

Val Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp
1265 1270 1275

Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
1280 1285 1290

Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln
1295 1300 1305

Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His
1310 1315 1320

Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His
1325 1330 1335

Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser
1340 1345 1350

Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His
1355 1360 1365

Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val
1370 1375 1380

Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
1385 1390 1395

Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
1400 1405 1410

Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
1415 1420 1425

Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val
1430 1435 1440

Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser
1445 1450 1455

Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
1460 1465 1470

Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro
1475 1480 1485

Ser Pro Asp Thr Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser
1490 1495 1500

Glu Ser Thr Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
1505 1510 1515

Arg Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val
1520 1525 1530

Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg
1535 1540 1545

Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
1550 1555 1560

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
1565 1570 1575

Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp
1580 1585 1590

Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
1595 1600 1605

Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp Thr Trp Leu
1610 1615 1620

Thr Thr Asn Leu Pro Ala Leu Thr Val Gly Ser Glu Ser Ser Leu
1625 1630 1635

Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly Arg Val
1640 1645 1650

Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser
1655 1660 1665

Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys
1670 1675 1680

Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly
1685 1690 1695

Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly Asn Glu
1700 1705 1710

Ser Tyr Leu Trp Ser Cys Pro His Lys Gly Trp Leu Thr His Asn
1715 1720 1725

Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Thr Gln
1730 1735 1740

Ile Asn Ser Thr Thr Asp Trp Trp His Pro Thr Thr Thr Thr
1745 1750 1755

Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly Phe Leu Phe Tyr Ala
1760 1765 1770

Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro Ala Tyr Tyr Pro Asn
1775 1780 1785

Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly Tyr Arg
1790 1795 1800

Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu Glu Ala His His Asn
1805 1810 1815

Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp Gly Ser Leu Asn Ser
1820 1825 1830

Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp Thr Arg Gln Ile Phe
1835 1840 1845

Thr Ser Ser Tyr Asn Arg Met Thr Ile His Phe Arg Ser Asp Ile
1850 1855 1860

Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp Tyr Asn Ser Phe Pro
1865 1870 1875

Ser Asp Ala Thr Leu Arg Leu Val Asn Leu Asn Ser Ser Tyr Gly
1880 1885 1890

Leu Cys Ala Gly Arg Val Glu Ile Tyr His Gly Gly Thr Trp Gly
1895 1900 1905

;

Thr Val Cys Asp Asp Ser Trp Thr Ile Gln Glu Ala Glu Val Val
1910 1915 1920

Cys Arg Gln Leu Gly Cys Gly Arg Ala Val Ser Ala Leu Gly Asn
1925 1930 1935

Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile Thr Leu Asp Asp Val
1940 1945 1950

Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp Gln Cys Arg Asn Arg
1955 1960 1965

Gly Trp Phe Ser His Asn Cys Asn His Arg Glu Asp Ala Gly Val
1970 1975 1980

Ile Cys Ser Gly Asn His Leu Ser Thr Pro Ala Pro Phe Leu Asn
1985 1990 1995

Ile Thr Arg Pro Asn Thr Asp Tyr Ser Cys Gly Gly Phe Leu Ser
2000 2005 2010

Gln Pro Ser Gly Asp Phe Ser Ser Pro Phe Tyr Pro Gly Asn Tyr
2015 2020 2025

Pro Asn Asn Ala Lys Cys Val Trp Asp Ile Glu Val Gln Asn Asn
2030 2035 2040

Tyr Arg Val Thr Val Ile Phe Arg Asp Val Gln Leu Glu Gly Gly
2045 2050 2055

Cys Asn Tyr Asp Tyr Ile Glu Val Phe Asp Gly Pro Tyr Arg Ser
2060 2065 2070

Ser Pro Leu Ile Ala Arg Val Cys Asp Gly Ala Arg Gly Ser Phe
2075 2080 2085

Thr Ser Ser Ser Asn Phe Met Ser Ile Arg Phe Ile Ser Asp His
2090 2095 2100

Ser Ile Thr Arg Arg Gly Phe Arg Ala Glu Tyr Tyr Ser Ser Pro
2105 2110 2115

Ser Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His Met Gln
2120 2125 2130

Ala Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe Ser Ala
2135 2140 2145

Ser Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu Cys Arg
2150 2155 2160

Pro Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro Tyr Ser
2165 2170 2175

Gly Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile Asp Tyr
2180 2185 2190

Ser Asn Phe Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg
2195 2200 2205

Arg Thr Asp Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn
2210 2215 2220

Thr Trp Val Asp Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val
2225 2230 2235

Ala Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly Asn Phe
2240 2245 2250

Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu Tyr Pro
2255 2260 2265

Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp Leu Tyr
2270 2275 2280

Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe
2285 2290 2295

Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser
2300 2305 2310

Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr
2315 2320 2325

Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg
2330 2335 2340

Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu
2345 2350 2355

Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg
2360 2365 2370

Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser
2375 2380 2385

Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln
2390 2395 2400

Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg
2405 2410

<210> 68
<211> 374
<212> PRT
<213> Mus musculus

<400> 68

Met Leu Pro Phe Leu Ser Met Leu Val Leu Leu Val Gln Pro Leu Gly

1

5

10

15

Asn Leu Gly Ala Glu Met Lys Ser Leu Ser Gln Arg Ser Val Pro Asn
20 25 30

Thr Cys Thr Leu Val Met Cys Ser Pro Thr Glu Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly Asp
50 55 60

Pro Gly Leu Pro Gly Pro Met Gly Leu Ser Gly Leu Gln Gly Pro Thr
65 70 75 80

Gly Pro Val Gly Pro Lys Gly Glu Asn Gly Ser Ala Gly Glu Pro Gly
85 90 95

Pro Lys Gly Glu Arg Gly Leu Ser Gly Pro Pro Gly Leu Pro Gly Ile
100 105 110

Pro Gly Pro Ala Gly Lys Glu Gly Pro Ser Gly Lys Gln Gly Asn Ile
115 120 125

Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys Gly
130 135 140

Glu Val Gly Ala Pro Gly Met Gln Gly Ser Thr Gly Ala Lys Gly Ser
145 150 155 160

Thr Gly Pro Lys Gly Glu Arg Gly Ala Pro Gly Val Gln Gly Ala Pro
165 170 175

Gly Asn Ala Gly Ala Ala Gly Pro Ala Gly Pro Ala Gly Pro Gln Gly
180 185 190

Ala Pro Gly Ser Arg Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Val
195 200 205

Pro Gly Asp Arg Gly Ile Lys Gly Glu Ser Gly Leu Pro Asp Ser Ala
210 215 220

Ala Leu Arg Gln Gln Met Glu Ala Leu Lys Gly Lys Leu Gln Arg Leu
225 230 235 240

Glu Val Ala Phe Ser His Tyr Gln Lys Ala Ala Leu Phe Pro Asp Gly
245 250 255

Arg Ser Val Gly Asp Lys Ile Phe Arg Thr Ala Asp Ser Glu Lys Pro
260 265 270

Phe Glu Asp Ala Gln Glu Met Cys Lys Gln Ala Gly Gly Gln Leu Ala
275 280 285

Ser Pro Arg Ser Ala Thr Glu Asn Ala Ala Ile Gln Gln Leu Ile Thr
290 295 300

Ala His Asn Lys Ala Ala Phe Leu Ser Met Thr Asp Val Gly Thr Glu
305 310 315 320

Gly Lys Phe Thr Tyr Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp
325 330 335

Ala Pro Gly Glu Pro Asn Asn Gly Gly Ala Glu Asn Cys Val Glu
340 345 350

Ile Phe Thr Asn Gly Gln Trp Asn Asp Lys Ala Cys Gly Glu Gln Arg
355 360 365

Leu Val Ile Cys Glu Phe
370

<210> 69
<211> 35
<212> PRT
<213> Canis familiaris

<400> 69

Leu Gly Ile Pro Cys Phe Pro Ser Ser Leu Lys Arg Leu Leu Ile Ile
1 5 10 15

Val Val Val Ile Val Leu Val Val Val Ile Val Gly Ala Leu Leu
20 25 30

Met Gly Leu
35

<210> 70
<211> 34

<212> PRT
<213> Bos taurus

<400> 70

Leu Ile Pro Cys Cys Pro Val Asn Ile Lys Arg Leu Leu Ile Val Val
1 5 10 15

Val Val Val Val Leu Leu Val Val Val Ile Val Gly Ala Leu Leu Met
20 25 30

Gly Leu

<210> 71
<211> 35
<212> PRT
<213> Homo sapiens

<400> 71

Gly Gln Ser Ile Thr Phe Asp Ala Gly Lys Glu Gln Cys Val Glu Met
1 5 10 15

Tyr Thr Asp Gly Gln Trp Asn Asp Arg Asn Cys Leu Tyr Leu Thr Ile
20 25 30

Cys Glu Phe
35

<210> 72
<211> 370
<212> PRT
<213> Oryctolagus cuniculus

<400> 72

Met Ala Lys Ser His Leu Pro Pro Trp Leu Leu Leu Leu Leu Pro
1 5 10 15

Thr Leu Cys Gly Pro Gly Thr Ala Val Trp Ala Thr Ser Pro Leu Ala
20 25 30

Cys Ala Gln Gly Pro Glu Phe Trp Cys Gln Ser Leu Glu Gln Ala Leu
35 40 45

Gln Cys Lys Ala Leu Gly His Cys Leu Gln Glu Val Trp Gly His Val
50 55 60

Gly Ala Asp Asp Leu Cys Gln Glu Cys Gln Asp Ile Val Asn Ile Leu
 65 70 75 80

Thr Lys Met Thr Lys Glu Ala Ile Phe Gln Asp Thr Ile Arg Lys Phe
 85 90 95

Leu Glu His Glu Cys Asp Val Leu Pro Leu Lys Leu Leu Val Pro Gln
 100 105 110

Cys His His Val Leu Asp Val Tyr Phe Pro Leu Thr Ile Thr Tyr Phe
 115 120 125

Leu Ser Gln Ile Asn Ala Lys Ala Ile Cys Gln His Leu Gly Leu Cys
 130 135 140

Gln Pro Gly Ser Pro Glu Pro Pro Leu Asp Pro Leu Pro Asp Lys Leu
 145 150 155 160

Val Leu Pro Thr Leu Leu Gly Ala Leu Pro Ala Lys Pro Gly Pro His
 165 170 175

Thr Gln Asp Leu Ser Ala Gln Arg Phe Pro Ile Pro Leu Pro Leu Cys
 180 185 190

Trp Leu Cys Arg Thr Leu Leu Lys Arg Ile Gln Ala Met Ile Pro Lys
 195 200 205

Gly Val Leu Ala Met Ala Val Ala Gln Val Cys His Val Val Pro Leu
 210 215 220

Val Val Gly Gly Ile Cys Gln Cys Leu Ala Glu Arg Tyr Thr Val Ile
 225 230 235 240

Leu Leu Glu Val Leu Leu Gly His Val Leu Pro Gln Leu Val Cys Gly
 245 250 255

Leu Val Leu Arg Cys Ser Ser Val Asp Ser Ile Gly Gln Val Pro Pro
 260 265 270

Thr Leu Glu Ala Leu Pro Gly Glu Trp Leu Pro Gln Asp Pro Glu Cys
 275 280 285

Pro Leu Cys Met Ser Val Thr Thr Gln Ala Arg Asn Ile Ser Glu Gln

290

295

300

Thr Arg Pro Gln Ala Val Tyr His Ala Cys Leu Ser Ser Gln Leu Asp
305 310 315 320

Lys Gln Glu Cys Glu Gln Phe Val Glu Leu His Thr Pro Gln Leu Leu
325 330 335

Ser Leu Leu Ser Arg Gly Trp Asp Ala Arg Ala Ile Cys Gln Ala Leu
340 345 350

Gly Ala Cys Val Ala Thr Leu Ser Pro Leu Gln Cys Ile Gln Ser Pro
355 360 365

His Phe
370

<210> 73
<211> 247
<212> PRT
<213> Oryctolagus cuniculus

<400> 73

Met Leu Leu Leu Ser Leu Ala Leu Thr Leu Ile Ser Ala Pro Ala Ser
1 5 10 15

Asp Thr Cys Asp Thr Lys Asp Val Cys Ile Gly Ser Pro Gly Ile Pro
20 25 30

Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
35 40 45

Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Gly
50 55 60

Met Pro Gly Leu Pro Gly Arg Asp Gly Leu Ile Gly Ala Pro Gly Val
65 70 75 80

Pro Gly Glu Arg Gly Asp Lys Gly Glu Pro Gly Glu Arg Gly Pro Pro
85 90 95

Gly Leu Pro Ala Tyr Leu Asp Glu Glu Leu Gln Ala Thr Leu His Glu
100 105 110

Leu Arg His His Ala Leu Gln Ser Ile Gly Val Leu Ser Leu Gln Gly
115 120 125

Ser Met Lys Ala Val Gly Glu Lys Ile Phe Ser Thr Asn Gly Gln Ser
130 135 140

Val Asn Phe Asp Ala Ile Arg Glu Val Cys Ala Arg Ala Gly Gly Arg
145 150 155 160

Ile Ala Ile Val Lys Glu Val Pro Arg Ser Leu Glu Glu Asn Glu Ala
165 170 175

Ile Ala Ser Arg Asn Thr Tyr Ala Tyr Leu Gly Leu Ala Glu Gly Pro
180 185 190

Thr Ala Gly Asp Phe Tyr Tyr Leu Asp Gly Asp Pro Val Asn Tyr Thr
195 200 205

Asn Trp Tyr Pro Gly Glu Pro Arg Gly Gln Gly Arg Glu Lys Cys Val
210 215 220

Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Lys Asn Cys Leu Gln Tyr
225 230 235 240

Arg Leu Val Ile Cys Glu Phe
245

<210> 74
<211> 369
<212> PRT
<213> Bos taurus

<400> 74

Met Leu Leu Leu Pro Leu Ser Val Leu Leu Leu Leu Thr Gln Pro Trp
1 5 10 15

Arg Ser Leu Gly Ala Glu Met Lys Ile Tyr Ser Gln Lys Thr Met Ala
20 25 30

Asn Ala Cys Thr Leu Val Met Cys Ser Pro Pro Glu Asp Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Ser Pro Gly Pro Ala Gly Arg Ala Gly Met Pro Gly Pro
65 70 75 80

Ala Gly Pro Ile Gly Leu Lys Gly Asp Asn Gly Ser Ala Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Gly Met Pro Gly
100 105 110

Pro Ala Gly Arg Glu Gly Pro Ser Gly Lys Gln Gly Ser Met Gly Pro
115 120 125

Pro Gly Thr Pro Gly Pro Lys Gly Asp Thr Gly Pro Lys Gly Gly Val
130 135 140

Gly Ala Pro Gly Ile Gln Gly Ser Pro Gly Pro Ala Gly Leu Lys Gly
145 150 155 160

Glu Arg Gly Ala Pro Gly Glu Pro Gly Ala Pro Gly Arg Ala Gly Ala
165 170 175

Pro Gly Pro Ala Gly Ala Ile Gly Pro Gln Gly Pro Ser Gly Ala Arg
180 185 190

Gly Pro Pro Gly Leu Lys Gly Asp Arg Gly Thr Pro Gly Glu Arg Gly
195 200 205

Ala Lys Gly Glu Ser Gly Leu Ala Glu Val Asn Ala Leu Arg Gln Arg
210 215 220

Val Gly Ile Leu Glu Gly Gln Leu Gln Arg Leu Gln Asn Ala Phe Ser
225 230 235 240

Gln Tyr Lys Lys Ala Met Leu Phe Pro Asn Gly Arg Ser Val Gly Glu
245 250 255

Lys Ile Phe Lys Thr Val Gly Ser Glu Lys Thr Phe Gln Asp Ala Gln
260 265 270

Gln Ile Cys Thr Gln Ala Gly Gly Gln Leu Pro Ser Pro Arg Ser Gly
275 280 285

Ala Glu Asn Glu Ala Leu Thr Gln Leu Ala Thr Ala Gln Asn Lys Ala

290

295

300

Ala Phe Leu Ser Met Ser Asp Thr Arg Lys Glu Gly Thr Phe Ile Tyr
305 310 315 320

Pro Thr Gly Glu Pro Leu Val Tyr Ser Asn Trp Ala Pro Gln Glu Pro
325 330 335

Asn Asn Asp Gly Gly Ser Glu Asn Cys Val Glu Ile Phe Pro Asn Gly
340 345 350

Lys Trp Asn Asp Lys Val Cys Gly Glu Gln Arg Leu Val Ile Cys Glu
355 360 365

Phe

<210> 75
<211> 301
<212> PRT
<213> Bos taurus

<220>
<221> MISC_FEATURE
<222> (7) . . (7)
<223> Unknown

<400> 75

Glu Glu Met Asp Val Tyr Xaa Glu Lys Thr Leu Thr Asp Pro Cys Thr
1 5 10 15

Leu Val Val Cys Ala Pro Pro Ala Asp Ser Leu Arg Gly His Asp Gly
20 25 30

Arg Asp Gly Lys Glu Gly Pro Gln Gly Glu Lys Gly Asp Pro Gly Pro
35 40 45

Pro Gly Met Pro Gly Pro Ala Gly Arg Glu Gly Pro Ser Gly Arg Gln
50 55 60

Gly Ser Met Gly Pro Pro Gly Thr Pro Gly Pro Lys Gly Glu Pro Gly
65 70 75 80

Pro Glu Gly Gly Val Gly Ala Pro Gly Met Pro Gly Ser Pro Gly Pro
85 90 95

Ala Gly Leu Lys Gly Glu Arg Gly Ala Pro Gly Pro Gly Gly Ala Ile
100 105 110

Gly Pro Gln Gly Pro Ser Gly Ala Met Gly Pro Pro Gly Leu Lys Gly
115 120 125

Asp Arg Gly Asp Pro Gly Glu Lys Gly Ala Arg Gly Glu Thr Ser Val
130 135 140

Leu Glu Val Asp Thr Leu Arg Gln Arg Met Arg Asn Leu Glu Gly Glu
145 150 155 160

Val Gln Arg Leu Gln Asn Ile Val Thr Gln Tyr Arg Lys Ala Val Leu
165 170 175

Phe Pro Asp Gly Gln Ala Val Gly Glu Lys Ile Phe Lys Thr Ala Gly
180 185 190

Ala Val Lys Ser Tyr Ser Asp Ala Glu Gln Leu Cys Arg Glu Ala Lys
195 200 205

Gly Gln Leu Ala Ser Pro Arg Ser Ser Ala Glu Asn Glu Ala Val Thr
210 215 220

Gln Leu Val Arg Ala Lys Asn Lys His Ala Tyr Leu Ser Met Asn Asp
225 230 235 240

Ile Ser Lys Glu Gly Lys Phe Thr Tyr Pro Thr Gly Gly Ser Leu Asp
245 250 255

Tyr Ser Asn Trp Ala Pro Gly Glu Pro Gly Asn Arg Ala Lys Asp Glu
260 265 270

Gly Pro Glu Asn Cys Leu Glu Ile Tyr Ser Asp Gly Asn Trp Asn Asp
275 280 285

Ile Glu Cys Arg Glu Glu Arg Leu Val Ile Cys Glu Phe
290 295 300

<210> 76
<211> 375
<212> PRT
<213> Homo sapiens

<400> 76

Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu
1 5 10 15

Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Thr Pro
20 25 30

Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly
50 55 60

Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln
65 70 75 80

Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro
85 90 95

Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly
100 105 110

Val Pro Gly Pro Ala Gly Arg Glu Gly Pro Leu Gly Lys Gln Gly Asn
115 120 125

Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys
130 135 140

Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly
145 150 155 160

Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val
165 170 175

Pro Gly Asn Ala Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln
180 185 190

Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly
195 200 205

Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val
210 215 220

Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His
225 230 235 240

Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn
245 250 255

Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys
260 265 270

Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gly Gln Leu
275 280 285

Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Ala Leu Gln Gln Leu Val
290 295 300

Val Ala Lys Asn Glu Ala Ala Phe Leu Ser Met Thr Asp Ser Lys Thr
305 310 315 320

Glu Gly Lys Phe Thr Tyr Pro Thr Gly Glu Ser Leu Val Tyr Ser Asn
325 330 335

Trp Ala Pro Gly Glu Pro Asn Asp Asp Gly Gly Ser Glu Asp Cys Val
340 345 350

Glu Ile Phe Thr Asn Gly Lys Trp Asn Asp Arg Ala Cys Gly Glu Lys
355 360 365

Arg Leu Val Val Cys Glu Phe
370 375

<210> 77
<211> 194
<212> PRT
<213> Rattus norvegicus

<400> 77

Met Asp Met Gly Ser Lys Glu Val Leu Met Glu Ser Pro Pro Asp Tyr
1 5 10 15

Ser Thr Gly Pro Arg Ser Gln Phe Arg Ile Pro Cys Cys Pro Val His
20 25 30

Leu Lys Arg Leu Leu Ile Val Val Val Val Val Leu Val Val Val
35 40 45

Val Ile Val Gly Ala Leu Leu Met Gly Leu His Met Ser Gln Lys His
50 55 60

Thr Glu Met Val Leu Glu Met Ser Ile Gly Gly Ala Pro Glu Thr Gln
65 70 75 80

Lys Arg Leu Ala Leu Ser Glu His Thr Asp Thr Ile Ala Thr Phe Ser
85 90 95

Ile Gly Ser Thr Gly Ile Val Leu Tyr Asp Tyr Gln Arg Leu Leu Thr
100 105 110

Ala Tyr Lys Pro Ala Pro Gly Thr Tyr Cys Tyr Ile Met Lys Met Ala
115 120 125

Pro Glu Ser Ile Pro Ser Leu Glu Ala Leu Ala Arg Lys Phe Lys Asn
130 135 140

Phe Gln Ala Lys Ser Ser Thr Pro Thr Ser Lys Leu Gly Gln Glu Glu
145 150 155 160

Gly His Ser Ala Gly Ser Asp Ser Asp Ser Ser Gly Arg Asp Leu Ala
165 170 175

Phe Leu Gly Leu Ala Val Ser Thr Leu Cys Gly Val Leu Pro Leu Tyr
180 185 190

Tyr Ile

<210> 78
<211> 247
<212> PRT
<213> Oryctolagus cuniculus

<400> 78

Met Leu Leu Leu Ser Leu Ala Leu Thr Leu Ile Ser Ala Pro Ala Ser
1 5 10 15

Asp Thr Cys Asp Thr Lys Asp Val Cys Ile Gly Ser Pro Gly Ile Pro
20 25 30

Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly

35

40

45

Val Lys Gly Asp Pro Gly Pro Pro Ala Pro Trp Ala Pro Pro Gly Gly
50 55 60

Met Pro Gly Leu Pro Gly Arg Asp Gly Leu Ile Gly Ala Pro Gly Val
65 70 75 80

Pro Gly Glu Arg Gly Asp Lys Gly Glu Pro Gly Glu Arg Gly Pro Pro
85 90 95

Gly Leu Pro Ala Tyr Leu Asp Glu Glu Leu Gln Ala Thr Leu His Glu
100 105 110

Leu Arg His His Ala Leu Gln Ser Ile Gly Val Leu Ser Leu Gln Gly
115 120 125

Ser Met Lys Ala Val Gly Glu Lys Ile Phe Ser Thr Asn Gly Gln Ser
130 135 140

Val Asn Phe Asp Ala Ile Arg Glu Val Cys Ala Arg Ala Gly Gly Arg
145 150 155 160

Ile Ala Val Pro Arg Ser Leu Glu Glu Asn Glu Ala Ile Ala Ser Ile
165 170 175

Val Lys Glu Arg Asn Thr Tyr Ala Tyr Leu Gly Leu Ala Glu Gly Pro
180 185 190

Thr Ala Gly Asp Phe Tyr Tyr Leu Asp Gly Asp Pro Val Asn Tyr Thr
195 200 205

Asn Trp Tyr Pro Gly Glu Pro Arg Gly Gln Gly Arg Glu Lys Cys Val
210 215 220

Glu Met Tyr Thr Asp Gly Lys Trp Asn Asp Lys Asn Cys Leu Gln Tyr
225 230 235 240

Arg Leu Val Ile Cys Glu Phe
245

<210> 79
<211> 652
<212> PRT

<213> Homo sapiens

<400> 79

Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Leu Thr
1 5 10 15

Gln Pro Gly Ala Gly Thr Gly Ala Asp Thr Glu Ala Val Val Cys Val
20 25 30

Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
35 40 45

Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
50 55 60

Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu
65 70 75 80

Arg Arg Glu Ala Ala Leu Thr Ala Arg Met Ser Lys Phe Trp Ile Gly
85 90 95

Leu Gln Arg Glu Lys Gly Lys Cys Leu Asp Pro Ser Leu Pro Leu Lys
100 105 110

Gly Phe Ser Trp Val Gly Gly Glu Asp Thr Pro Tyr Ser Asn Trp
115 120 125

His Lys Glu Leu Arg Asn Ser Cys Ile Ser Lys Arg Cys Val Ser Leu
130 135 140

Leu Leu Asp Leu Ser Gln Pro Leu Leu Pro Ser Arg Leu Pro Lys Trp
145 150 155 160

Ser Glu Gly Pro Cys Gly Ser Pro Gly Ser Pro Gly Ser Asn Ile Glu
165 170 175

Gly Phe Val Cys Lys Phe Ser Phe Lys Gly Met Cys Arg Pro Leu Ala
180 185 190

Leu Gly Gly Pro Gly Gln Val Thr Tyr Thr Pro Phe Gln Thr Thr
195 200 205

Ser Ser Ser Leu Glu Ala Val Pro Phe Ala Ser Ala Ala Asn Val Ala
210 215 220

Cys Gly Glu Gly Asp Lys Asp Glu Thr Gln Ser His Tyr Phe Leu Cys
225 230 235 240

Lys Glu Lys Ala Pro Asp Val Phe Asp Trp Gly Ser Ser Gly Pro Leu
245 250 255

Cys Val Ser Pro Lys Tyr Gly Cys Asn Phe Asn Asn Gly Gly Cys His
260 265 270

Gln Asp Cys Phe Glu Gly Gly Asp Gly Ser Phe Leu Cys Gly Cys Arg
275 280 285

Pro Gly Phe Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn
290 295 300

Pro Cys Ser Ser Ser Pro Cys Arg Gly Gly Ala Thr Cys Val Leu Gly
305 310 315 320

Pro His Gly Lys Asn Tyr Thr Cys Arg Cys Pro Gln Gly Tyr Gln Leu
325 330 335

Asp Ser Ser Gln Leu Asp Cys Val Asp Val Asp Glu Cys Gln Asp Ser
340 345 350

Pro Cys Ala Gln Glu Cys Val Asn Thr Pro Gly Gly Phe Arg Cys Glu
355 360 365

Cys Trp Val Gly Tyr Glu Pro Gly Gly Pro Gly Glu Gly Ala Cys Gln
370 375 380

Asp Val Asp Glu Cys Ala Leu Gly Arg Ser Pro Cys Ala Gln Gly Cys
385 390 395 400

Thr Asn Thr Asp Gly Ser Phe His Cys Ser Cys Glu Glu Gly Tyr Val
405 410 415

Leu Ala Gly Glu Asp Gly Thr Gln Cys Gln Asp Val Asp Glu Cys Val
420 425 430

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly
450 455 460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Glu Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Pro Gly Val Trp
530 535 540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 80

<211> 644

<212> PRT

<213> Mus musculus

<400> 80

Met Ala Ile Ser Thr Gly Leu Leu Leu Gly Leu Leu Gly Gln
1 5 10 15

Pro Trp Ala Gly Ala Ala Asp Ser Gln Ala Val Val Cys Glu Gly
20 25 30

Thr Ala Cys Tyr Thr Ala His Trp Gly Lys Leu Ser Ala Ala Glu Ala
35 40 45

Gln His Arg Cys Asn Glu Asn Gly Gly Asn Leu Ala Thr Val Lys Ser
50 55 60

Glu Glu Glu Ala Arg His Val Gln Gln Ala Leu Thr Gln Leu Leu Lys
65 70 75 80

Thr Lys Ala Pro Leu Glu Ala Lys Met Gly Lys Phe Trp Ile Gly Leu
85 90 95

Gln Arg Glu Lys Gly Asn Cys Thr Tyr His Asp Leu Pro Met Arg Gly
100 105 110

Phe Ser Trp Val Gly Gly Glu Asp Thr Ala Tyr Ser Asn Trp Tyr
115 120 125

Lys Ala Ser Lys Ser Ser Cys Ile Phe Lys Arg Cys Val Ser Leu Ile
130 135 140

Leu Asp Leu Ser Leu Thr Pro His Pro Ser His Leu Pro Lys Trp His
145 150 155 160

Glu Ser Pro Cys Gly Thr Pro Glu Ala Pro Gly Asn Ser Ile Glu Gly
165 170 175

Phe Leu Cys Lys Phe Asn Phe Lys Gly Met Cys Arg Pro Leu Ala Leu
180 185 190

Gly Gly Pro Gly Arg Val Thr Tyr Thr Pro Phe Gln Ala Thr Thr
195 200 205

Ser Ser Leu Glu Ala Val Pro Phe Ala Ser Val Ala Asn Val Ala Cys
210 215 220

Gly Asp Glu Ala Lys Ser Glu Thr His Tyr Phe Leu Cys Asn Glu Lys

225

230

235

240

Thr Pro Gly Ile Phe His Trp Gly Ser Ser Gly Pro Leu Cys Val Ser
245 250 255

Pro Lys Phe Gly Cys Ser Phe Asn Asn Gly Gly Cys Gln Gln Asp Cys
260 265 270

Phe Glu Gly Gly Asp Gly Ser Phe Arg Cys Gly Cys Arg Pro Gly Phe
275 280 285

Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn Pro Cys Ser
290 295 300

Ser Asn Pro Cys Thr Gly Gly Met Cys His Ser Val Pro Leu Ser
305 310 315 320

Glu Asn Tyr Thr Cys Arg Cys Pro Ser Gly Tyr Gln Leu Asp Ser Ser
325 330 335

Gln Val His Cys Val Asp Ile Asp Glu Cys Gln Asp Ser Pro Cys Ala
340 345 350

Gln Asp Cys Val Asn Thr Leu Gly Ser Phe His Cys Glu Cys Trp Val
355 360 365

Gly Tyr Gln Pro Ser Gly Pro Lys Glu Glu Ala Cys Glu Asp Val Asp
370 375 380

Glu Cys Ala Ala Ala Asn Ser Pro Cys Ala Gln Gly Cys Ile Asn Thr
385 390 395 400

Asp Gly Ser Phe Tyr Cys Ser Cys Lys Glu Gly Tyr Ile Val Ser Gly
405 410 415

Glu Asp Ser Thr Gln Cys Glu Asp Ile Asp Glu Cys Ser Asp Ala Arg
420 425 430

Gly Asn Pro Cys Asp Ser Leu Cys Phe Asn Thr Asp Gly Ser Phe Arg
435 440 445

Cys Gly Cys Pro Pro Gly Trp Glu Leu Ala Pro Asn Gly Val Phe Cys
450 455 460

Ser Arg Gly Thr Val Phe Ser Glu Leu Pro Ala Arg Pro Pro Gln Lys
465 470 475 480

Glu Asp Asn Asp Asp Arg Lys Glu Ser Thr Met Pro Pro Thr Glu Met
485 490 495

Pro Ser Ser Pro Ser Gly Ser Lys Asp Val Ser Asn Arg Ala Gln Thr
500 505 510

Thr Gly Leu Phe Val Gln Ser Asp Ile Pro Thr Ala Ser Val Pro Leu
515 520 525

Glu Ile Glu Ile Pro Ser Glu Val Ser Asp Val Trp Phe Glu Leu Gly
530 535 540

Thr Tyr Leu Pro Thr Thr Ser Gly His Ser Lys Pro Thr His Glu Asp
545 550 555 560

Ser Val Ser Ala His Ser Asp Thr Asp Gly Gln Asn Leu Leu Phe
565 570 575

Tyr Ile Leu Gly Thr Val Val Ala Ile Ser Leu Leu Val Leu Ala
580 585 590

Leu Gly Ile Leu Ile Tyr His Lys Arg Arg Ala Lys Lys Glu Glu Ile
595 600 605

Lys Glu Lys Lys Pro Gln Asn Ala Ala Asp Ser Tyr Ser Trp Val Pro
610 615 620

Glu Arg Ala Glu Ser Gln Ala Pro Glu Asn Gln Tyr Ser Pro Thr Pro
625 630 635 640

Gly Thr Asp Cys

<210> 81
<211> 688
<212> PRT
<213> Homo sapiens

<400> 81

Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu
1 5 10 15

Pro Thr Met Tyr Gly Glu Ile Leu Ser Pro Asn Tyr Pro Gln Ala Tyr
20 25 30

Pro Ser Glu Val Glu Lys Ser Trp Asp Ile Glu Val Pro Glu Gly Tyr
35 40 45

Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn
50 55 60

Cys Ala Tyr Asp Ser Val Gln Ile Ile Ser Gly Asp Thr Glu Glu Gly
65 70 75 80

Arg Leu Cys Gly Gln Arg Ser Ser Asn Asn Pro His Ser Pro Ile Val
85 90 95

Glu Glu Phe Gln Val Pro Tyr Asn Lys Leu Gln Val Ile Phe Lys Ser
100 105 110

Asp Phe Ser Asn Glu Glu Arg Phe Thr Gly Phe Ala Ala Tyr Tyr Val
115 120 125

Ala Thr Asp Ile Asn Glu Cys Thr Asp Phe Val Asp Val Pro Cys Ser
130 135 140

His Phe Cys Asn Asn Phe Ile Gly Gly Tyr Phe Cys Ser Cys Pro Pro
145 150 155 160

Glu Tyr Phe Leu His Asp Asp Met Lys Asn Cys Gly Val Asn Cys Ser
165 170 175

Gly Asp Val Phe Thr Ala Leu Ile Gly Glu Ile Ala Ser Pro Asn Tyr
180 185 190

Pro Lys Pro Tyr Pro Glu Asn Ser Arg Cys Glu Tyr Gln Ile Arg Leu
195 200 205

Glu Lys Gly Phe Gln Val Val Val Thr Leu Arg Arg Glu Asp Phe Asp
210 215 220

Val Glu Ala Ala Asp Ser Ala Gly Asn Cys Leu Asp Ser Leu Val Phe
225 230 235 240

Val Ala Gly Asp Arg Gln Phe Gly Pro Tyr Cys Gly His Gly Phe Pro
245 250 255

Gly Pro Leu Asn Ile Glu Thr Lys Ser Asn Ala Leu Asp Ile Ile Phe
260 265 270

Gln Thr Asp Leu Thr Gly Gln Lys Lys Gly Trp Lys Leu Arg Tyr His
275 280 285

Gly Asp Pro Met Pro Cys Pro Lys Glu Asp Thr Pro Asn Ser Val Trp
290 295 300

Glu Pro Ala Lys Ala Lys Tyr Val Phe Arg Asp Val Val Gln Ile Thr
305 310 315 320

Cys Leu Asp Gly Phe Glu Val Val Glu Gly Arg Val Gly Ala Thr Ser
325 330 335

Phe Tyr Ser Thr Cys Gln Ser Asn Gly Lys Trp Ser Asn Ser Lys Leu
340 345 350

Lys Cys Gln Pro Val Asp Cys Gly Ile Pro Glu Ser Ile Glu Asn Gly
355 360 365

Lys Val Glu Asp Pro Glu Ser Thr Leu Phe Gly Ser Val Ile Arg Tyr
370 375 380

Thr Cys Glu Glu Pro Tyr Tyr Tyr Met Glu Asn Gly Gly Gly Glu
385 390 395 400

Tyr His Cys Ala Gly Asn Gly Ser Trp Val Asn Glu Val Leu Gly Pro
405 410 415

Glu Leu Pro Lys Cys Val Pro Val Cys Gly Val Pro Arg Glu Pro Phe
420 425 430

Glu Glu Lys Gln Arg Ile Ile Gly Gly Ser Asp Ala Asp Ile Lys Asn
435 440 445

Phe Pro Trp Gln Val Phe Phe Asp Asn Pro Trp Ala Gly Gly Ala Leu
450 455 460

Ile Asn Glu Tyr Trp Val Leu Thr Ala Ala His Val Val Glu Gly Asn
465 470 475 480

Arg Glu Pro Thr Met Tyr Val Gly Ser Thr Ser Val Gln Thr Ser Arg
485 490 495

Leu Ala Lys Ser Lys Met Leu Thr Pro Glu His Val Phe Ile His Pro
500 505 510

Gly Trp Lys Leu Leu Glu Val Pro Glu Gly Arg Thr Asn Phe Asp Asn
515 520 525

Asp Ile Ala Leu Val Arg Leu Lys Asp Pro Val Lys Met Gly Pro Thr
530 535 540

Val Ser Pro Ile Cys Leu Pro Gly Thr Ser Ser Asp Tyr Asn Leu Met
545 550 555 560

Asp Gly Asp Leu Gly Leu Ile Ser Gly Trp Gly Arg Thr Glu Lys Arg
565 570 575

Asp Arg Ala Val Arg Leu Lys Ala Ala Arg Leu Pro Val Ala Pro Leu
580 585 590

Arg Lys Cys Lys Glu Val Lys Val Glu Lys Pro Thr Ala Asp Ala Glu
595 600 605

Ala Tyr Val Phe Thr Pro Asn Met Ile Cys Ala Gly Gly Glu Lys Gly
610 615 620

Met Asp Ser Cys Lys Gly Asp Ser Gly Ala Phe Ala Val Gln Asp
625 630 635 640

Pro Asn Asp Lys Thr Lys Phe Tyr Ala Ala Gly Leu Val Ser Trp Gly
645 650 655

Pro Gln Cys Gly Thr Tyr Gly Leu Tyr Thr Arg Val Lys Asn Tyr Val
660 665 670

Asp Trp Ile Met Lys Thr Met Gln Glu Asn Ser Thr Pro Arg Glu Asp
675 680 685

<210> 82
<211> 652
<212> PRT
<213> Homo sapiens

<400> 82

Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Leu Thr
1 5 10 15

Gln Pro Gly Ala Gly Thr Gly Ala Asp Thr Glu Ala Val Val Cys Val
20 25 30

Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
35 40 45

Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
50 55 60

Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu
65 70 75 80

Arg Arg Glu Ala Ala Leu Thr Ala Arg Met Ser Lys Phe Trp Ile Gly
85 90 95

Leu Gln Arg Glu Lys Gly Lys Cys Leu Asp Pro Ser Leu Pro Leu Lys
100 105 110

Gly Phe Ser Trp Val Gly Gly Glu Asp Thr Pro Tyr Ser Asn Trp
115 120 125

His Lys Glu Leu Arg Asn Ser Cys Ile Ser Lys Arg Cys Val Ser Leu
130 135 140

Leu Leu Asp Leu Ser Gln Pro Leu Leu Pro Asn Arg Leu Pro Lys Trp
145 150 155 160

Ser Glu Gly Pro Cys Gly Ser Pro Gly Ser Pro Gly Ser Asn Ile Glu
165 170 175

Gly Phe Val Cys Lys Phe Ser Phe Lys Gly Met Cys Arg Pro Leu Ala
180 185 190

Leu Gly Gly Pro Gly Gln Val Thr Tyr Thr Thr Pro Phe Gln Thr Thr
195 200 205

Ser Ser Ser Leu Glu Ala Val Pro Phe Ala Ser Ala Ala Asn Val Ala
210 215 220

Cys Gly Glu Gly Asp Lys Asp Glu Thr Gln Ser His Tyr Phe Leu Cys
225 230 235 240

Lys Glu Lys Ala Pro Asp Val Phe Asp Trp Gly Ser Ser Gly Pro Leu
245 250 255

Cys Val Ser Pro Lys Tyr Gly Cys Asn Phe Asn Asn Gly Gly Cys His
260 265 270

Gln Asp Cys Phe Glu Gly Asp Gly Ser Phe Leu Cys Gly Cys Arg
275 280 285

Pro Gly Phe Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn
290 295 300

Pro Cys Ser Ser Ser Pro Cys Arg Gly Gly Ala Thr Cys Val Leu Gly
305 310 315 320

Pro His Gly Lys Asn Tyr Thr Cys Arg Cys Pro Gln Gly Tyr Gln Leu
325 330 335

Asp Ser Ser Gln Leu Asp Cys Val Asp Val Asp Glu Cys Gln Asp Ser
340 345 350

Pro Cys Ala Gln Glu Cys Val Asn Thr Pro Gly Gly Phe Arg Cys Glu
355 360 365

Cys Trp Val Gly Tyr Glu Pro Gly Gly Pro Gly Glu Gly Ala Cys Gln
370 375 380

Asp Val Asp Glu Cys Ala Leu Gly Arg Ser Pro Cys Ala Gln Gly Cys
385 390 395 400

Thr Asn Thr Asp Gly Ser Phe His Cys Ser Cys Glu Glu Gly Tyr Val
405 410 415

Leu Ala Gly Glu Asp Gly Thr Gln Cys Gln Asp Val Asp Glu Cys Val
420 425 430

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly

450

455

460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Ser Gly Val Trp
530 535 540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 83

<211> 248

<212> PRT

<213> Homo sapiens

<400> 83

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 84
<211> 159
<212> PRT
<213> Zephyranthes candida

<400> 84

Met Thr Arg Ile Thr Phe Leu Val Val Ala Ala Ile Phe Leu Gly Val
1 5 10 15

Ile Thr Pro Ser Cys Leu Ser Val Cys Asp Ser Ile Leu Tyr Ser Gly
20 25 30

Glu Thr Leu Ser Ala Gly Gln Ser Leu Asn Asn Gly Pro Tyr Thr Phe
35 40 45

Ile Met Gln Glu Asp Cys Asn Leu Val Leu Tyr Asn Val Asp Lys Pro
50 55 60

Ile Trp Ala Ser Asn Thr Gly Gly Leu Ala Arg Gly Cys His Leu Ser
65 70 75 80

Met Gln Arg Asp Gly Asn Leu Val Val Tyr Ser Gln Arg Asn Arg Pro
85 90 95

Ile Trp Ala Ser Asn Thr Gly Gly His Asn Ala Ala Asn Tyr Val Leu
100 105 110

Ile Leu Gln Lys Asp Arg Asn Val Val Ile Tyr Gly Pro Ala Lys Trp
115 120 125

Ala Thr Gly Thr Tyr Thr Gly Ala Val Gly Ile Ser Gly Phe Glu Thr
130 135 140

Gly Thr Ala Gly Ile Ile Lys Pro Val Thr Val Lys Ser Ala Lys
145 150 155

<210> 85
<211> 239
<212> PRT
<213> Mus musculus

<400> 85

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 86
<211> 244
<212> PRT
<213> Mus musculus

<400> 86

Met Ser Ile Phe Thr Ser Phe Leu Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 87
<211> 248
<212> PRT
<213> Homo sapiens

<400> 87

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 88
<211> 185
<212> PRT
<213> Mus musculus

<400> 88

Met Arg Leu Leu Ile Phe Leu Gly Leu Leu Trp Ser Leu Val Ala Thr
1 5 10 15

Leu Leu Gly Ser Lys Trp Pro Glu Pro Val Phe Gly Arg Leu Val Ser
20 25 30

Pro Gly Phe Pro Glu Lys Tyr Ala Asp His Gln Asp Arg Ser Trp Thr
35 40 45

Leu Thr Ala Pro Pro Gly Tyr Arg Leu Arg Leu Tyr Phe Thr His Phe
50 55 60

Asp Leu Glu Leu Ser Tyr Arg Cys Glu Tyr Asp Phe Val Lys Leu Ser
65 70 75 80

Ser Gly Thr Lys Val Leu Ala Thr Leu Cys Gly Gln Glu Ser Thr Asp

85

90

95

Thr Glu Gln Ala Pro Gly Asn Asp Thr Phe Tyr Ser Leu Gly Pro Ser
100 105 110

Leu Lys Val Thr Phe His Ser Asp Tyr Ser Asn Glu Lys Pro Phe Thr
115 120 125

Gly Phe Glu Ala Phe Tyr Ala Ala Glu Asp Val Asp Glu Cys Arg Val
130 135 140

Ser Leu Gly Asp Ser Val Pro Cys Asp His Tyr Cys His Asn Tyr Leu
145 150 155 160

Gly Gly Tyr Tyr Cys Ser Cys Arg Ala Gly Tyr Val Leu His Gln Asn
165 170 175

Lys His Thr Cys Ser Glu Gln Ser Leu
180 185

<210> 89
<211> 643
<212> PRT
<213> Rattus norvegicus

<400> 89

Met Val Thr Ser Thr Gly Leu Leu Leu Leu Gly Leu Leu Gly Gln
1 5 10 15

Leu Trp Ala Gly Ala Ala Ala Asp Ser Glu Ala Val Val Cys Glu Gly
20 25 30

Thr Ala Cys Tyr Thr Ala His Trp Gly Lys Leu Ser Ala Ala Glu Ala
35 40 45

Gln His Arg Cys Asn Glu Asn Gly Gly Asn Leu Ala Thr Val Lys Ser
50 55 60

Glu Glu Glu Ala Arg His Val Gln Glu Ala Leu Ala Gln Leu Leu Lys
65 70 75 80

Thr Lys Ala Pro Ser Glu Thr Lys Ile Gly Lys Phe Trp Ile Gly Leu
85 90 95

Gln Arg Glu Lys Gly Lys Cys Thr Tyr His Asp Leu Pro Met Lys Gly
100 105 110

Phe Ser Trp Val Gly Gly Glu Asp Thr Thr Tyr Ser Asn Trp Tyr
115 120 125

Lys Ala Ser Lys Ser Ser Cys Ile Ser Lys Arg Cys Val Ser Leu Ile
130 135 140

Leu Asp Leu Ser Leu Lys Pro His Pro Ser His Leu Pro Lys Trp His
145 150 155 160

Glu Ser Pro Cys Gly Thr Pro Asp Ala Pro Gly Asn Ser Ile Glu Gly
165 170 175

Phe Leu Cys Lys Phe Asn Phe Lys Gly Met Cys Ser Pro Leu Ala Leu
180 185 190

Gly Gly Pro Gly Gln Leu Thr Tyr Thr Thr Pro Phe Gln Ala Thr Thr
195 200 205

Ser Ser Leu Lys Ala Val Pro Phe Ala Ser Val Ala Asn Val Val Cys
210 215 220

Gly Asp Glu Ala Glu Ser Lys Thr Asn Tyr Tyr Leu Cys Lys Glu Thr
225 230 235 240

Thr Ala Gly Val Phe His Trp Gly Ser Ser Gly Pro Leu Cys Val Ser
245 250 255

Pro Lys Phe Gly Cys Ser Phe Asn Asn Gly Gly Cys Gln Gln Asp Cys
260 265 270

Phe Glu Gly Gly Asp Gly Ser Phe Arg Cys Gly Cys Arg Pro Gly Phe
275 280 285

Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn Pro Cys Ser
290 295 300

Ser Asn Pro Cys Thr Gly Gly Met Cys His Ser Val Pro Leu Ser
305 310 315 320

Glu Asn Tyr Thr Cys His Cys Pro Arg Gly Tyr Gln Leu Asp Ser Ser
325 330 335

Gln Val His Cys Val Asp Ile Asp Glu Cys Glu Asp Ser Pro Cys Asp
340 345 350

Gln Glu Cys Ile Asn Thr Pro Gly Gly Phe His Cys Glu Cys Trp Val
355 360 365

Gly Tyr Gln Ser Ser Gly Ser Lys Glu Glu Ala Cys Glu Asp Val Asp
370 375 380

Glu Cys Thr Ala Ala Tyr Ser Pro Cys Ala Gln Gly Cys Thr Asn Thr
385 390 395 400

Asp Gly Ser Phe Tyr Cys Ser Cys Lys Glu Gly Tyr Ile Met Ser Gly
405 410 415

Glu Asp Ser Thr Gln Cys Glu Asp Ile Asp Glu Cys Leu Gly Asn Pro
420 425 430

Cys Asp Thr Leu Cys Ile Asn Thr Asp Gly Ser Phe Arg Cys Gly Cys
435 440 445

Pro Ala Gly Phe Glu Leu Ala Pro Asn Gly Val Ser Cys Thr Arg Gly
450 455 460

Ser Met Phe Ser Glu Leu Pro Ala Arg Pro Pro Gln Lys Glu Asp Lys
465 470 475 480

Gly Asp Gly Lys Glu Ser Thr Val Pro Leu Thr Glu Met Pro Gly Ser
485 490 495

Leu Asn Gly Ser Lys Asp Val Ser Asn Arg Ala Gln Thr Thr Asp Leu
500 505 510

Ser Ile Gln Ser Asp Ser Ser Thr Ala Ser Val Pro Leu Glu Ile Glu
515 520 525

Val Ser Ser Glu Ala Ser Asp Val Trp Leu Asp Leu Gly Thr Tyr Leu
530 535 540

Pro Thr Thr Ser Gly His Ser Gln Pro Thr His Glu Asp Ser Val Pro
545 550 555 560

Ala His Ser Asp Ser Asp Thr Asp Gly Gln Lys Leu Leu Leu Phe Tyr
565 570 575

Ile Leu Gly Thr Val Val Ala Ile Ser Leu Leu Leu Ala Leu Ala Leu
580 585 590

Gly Leu Leu Ile Tyr Leu Lys Arg Lys Ala Lys Lys Glu Glu Ile Lys
595 600 605

Glu Lys Lys Ala Gln Asn Ala Ala Asp Ser Tyr Ser Trp Ile Pro Glu
610 615 620

Arg Ala Glu Ser Arg Ala Pro Glu Asn Gln Tyr Ser Pro Thr Pro Gly
625 630 635 640

Thr Asp Cys

<210> 90
<211> 686
<212> PRT
<213> Homo sapiens

<400> 90

Met Arg Leu Leu Thr Leu Leu Gly Leu Leu Cys Gly Ser Val Ala Thr
1 5 10 15

Pro Leu Gly Pro Lys Trp Pro Glu Pro Val Phe Gly Arg Leu Ala Ser
20 25 30

Pro Gly Phe Pro Gly Glu Tyr Ala Asn Asp Gln Glu Arg Arg Trp Thr
35 40 45

Leu Thr Ala Pro Pro Gly Tyr Arg Leu Arg Leu Tyr Phe Thr His Phe
50 55 60

Asp Leu Glu Leu Ser His Leu Cys Glu Tyr Asp Phe Val Lys Leu Ser
65 70 75 80

Ser Gly Ala Lys Val Leu Ala Thr Leu Cys Gly Gln Glu Ser Thr Asp
85 90 95

Thr Glu Arg Ala Pro Gly Lys Asp Thr Phe Tyr Ser Leu Gly Ser Ser
100 105 110

Leu Asp Ile Thr Phe Arg Ser Asp Tyr Ser Asn Glu Lys Pro Phe Thr
115 120 125

Gly Phe Glu Ala Phe Tyr Ala Ala Glu Asp Ile Asp Glu Cys Gln Val
130 135 140

Ala Pro Gly Glu Ala Pro Thr Cys Asp His His Cys His Asn His Leu
145 150 155 160

Gly Gly Phe Tyr Cys Ser Cys Arg Ala Gly Tyr Val Leu His Arg Asn
165 170 175

Lys Arg Thr Cys Ser Ala Leu Cys Ser Gly Gln Val Phe Thr Gln Arg
180 185 190

Ser Gly Glu Leu Ser Ser Pro Glu Tyr Pro Arg Pro Tyr Pro Lys Leu
195 200 205

Ser Ser Cys Thr Tyr Ser Ile Ser Leu Glu Glu Gly Phe Ser Val Ile
210 215 220

Leu Asp Phe Val Glu Ser Phe Asp Val Glu Thr His Pro Glu Thr Leu
225 230 235 240

Cys Pro Tyr Asp Phe Leu Lys Ile Gln Thr Asp Arg Glu Glu His Gly
245 250 255

Pro Phe Cys Gly Lys Thr Leu Pro His Arg Ile Glu Thr Lys Ser Asn
260 265 270

Thr Val Thr Ile Thr Phe Val Thr Asp Glu Ser Gly Asp His Thr Gly
275 280 285

Trp Lys Ile His Tyr Thr Ser Thr Ala Gln Pro Cys Pro Tyr Pro Met
290 295 300

Ala Pro Pro Asn Gly His Val Ser Pro Val Gln Ala Lys Tyr Ile Leu
305 310 315 320

Lys Asp Ser Phe Ser Ile Phe Cys Glu Thr Gly Tyr Glu Leu Leu Gln
325 330 335

Gly His Leu Pro Leu Lys Ser Phe Thr Ala Val Cys Gln Lys Asp Gly

340

345

350

Ser Trp Asp Arg Pro Met Pro Ala Cys Ser Ile Val Asp Cys Gly Pro
355 360 365

Pro Asp Asp Leu Pro Ser Gly Arg Val Glu Tyr Ile Thr Gly Pro Gly
370 375 380

Val Thr Thr Tyr Lys Ala Val Ile Gln Tyr Ser Cys Glu Glu Thr Phe
385 390 395 400

Tyr Thr Met Lys Val Asn Asp Gly Lys Tyr Val Cys Glu Ala Asp Gly
405 410 415

Phe Trp Thr Ser Ser Lys Gly Glu Lys Ser Leu Pro Val Cys Glu Pro
420 425 430

Val Cys Gly Leu Ser Ala Arg Thr Thr Gly Gly Arg Ile Tyr Gly Gly
435 440 445

Gln Lys Ala Lys Pro Gly Asp Phe Pro Trp Gln Val Leu Ile Leu Gly
450 455 460

Gly Thr Thr Ala Ala Gly Ala Leu Leu Tyr Asp Asn Trp Val Leu Thr
465 470 475 480

Ala Ala His Ala Val Tyr Glu Gln Lys His Asp Ala Ser Ala Leu Asp
485 490 495

Ile Arg Met Gly Thr Leu Lys Arg Leu Ser Pro His Tyr Thr Gln Ala
500 505 510

Trp Ser Glu Ala Val Phe Ile His Glu Gly Tyr Thr His Asp Ala Gly
515 520 525

Phe Asp Asn Asp Ile Ala Leu Ile Lys Leu Asn Asn Lys Val Val Ile
530 535 540

Asn Ser Asn Ile Thr Pro Ile Cys Leu Pro Arg Lys Glu Ala Glu Ser
545 550 555 560

Phe Met Arg Thr Asp Asp Ile Gly Thr Ala Ser Gly Trp Gly Leu Thr
565 570 575

Gln Arg Gly Phe Leu Ala Arg Asn Leu Met Tyr Val Asp Ile Pro Ile
580 585 590

Val Asp His Gln Lys Cys Thr Ala Ala Tyr Glu Lys Pro Pro Tyr Pro
595 600 605

Arg Gly Ser Val Thr Ala Asn Met Leu Cys Ala Gly Leu Glu Ser Gly
610 615 620

Gly Lys Asp Ser Cys Arg Gly Asp Ser Gly Gly Ala Leu Val Phe Leu
625 630 635 640

Asp Ser Glu Thr Glu Arg Trp Phe Val Gly Gly Ile Val Ser Trp Gly
645 650 655

Ser Met Asn Cys Gly Glu Ala Gly Gln Tyr Gly Val Tyr Thr Lys Val
660 665 670

Ile Asn Tyr Ile Pro Trp Ile Glu Asn Ile Ile Ser Asp Phe
675 680 685

<210> 91
<211> 185
<212> PRT
<213> Homo sapiens

<400> 91

Met Arg Leu Leu Thr Leu Leu Gly Leu Leu Cys Gly Ser Val Ala Thr
1 5 10 15

Pro Leu Gly Pro Lys Trp Pro Glu Pro Val Phe Gly Arg Leu Ala Ser
20 25 30

Pro Gly Phe Pro Gly Glu Tyr Ala Asn Asp Gln Glu Arg Arg Trp Thr
35 40 45

Leu Thr Ala Pro Pro Gly Tyr Arg Leu Arg Leu Tyr Phe Thr His Phe
50 55 60

Asp Leu Glu Leu Ser His Leu Cys Glu Tyr Asp Phe Val Lys Leu Ser
65 70 75 80

Ser Gly Ala Lys Val Leu Ala Thr Leu Cys Gly Gln Glu Ser Thr Asp
85 90 95

Thr Glu Arg Ala Pro Gly Lys Asp Thr Phe Tyr Ser Leu Gly Ser Ser
100 105 110

Leu Asp Ile Thr Phe Arg Ser Asp Tyr Ser Asn Glu Lys Pro Phe Thr
115 120 125

Gly Phe Glu Ala Phe Tyr Ala Ala Glu Asp Ile Asp Glu Cys Gln Val
130 135 140

Ala Pro Gly Glu Ala Pro Thr Cys Asp His His Cys His Asn His Leu
145 150 155 160

Gly Gly Phe Tyr Cys Ser Cys Arg Ala Gly Tyr Val Leu His Arg Asn
165 170 175

Lys Arg Thr Cys Ser Glu Gln Ser Leu
180 185

<210> 92
<211> 728
<212> PRT
<213> Homo sapiens

<400> 92

Met Arg Trp Leu Leu Leu Tyr Tyr Ala Leu Cys Phe Ser Leu Ser Lys
1 5 10 15

Ala Ser Ala His Thr Val Glu Leu Asn Asn Met Phe Gly Gln Ile Gln
20 25 30

Ser Pro Gly Tyr Pro Asp Ser Tyr Pro Ser Asp Ser Glu Val Thr Trp
35 40 45

Asn Ile Thr Val Pro Asp Gly Phe Arg Ile Lys Leu Tyr Phe Met His
50 55 60

Phe Asn Leu Glu Ser Ser Tyr Leu Cys Glu Tyr Asp Tyr Val Lys Val
65 70 75 80

Glu Thr Glu Asp Gln Val Leu Ala Thr Phe Cys Gly Arg Glu Thr Thr
85 90 95

Asp Thr Glu Gln Thr Pro Gly Gln Glu Val Val Leu Ser Pro Gly Ser

100 105 110

Phe Met Ser Ile Thr Phe Arg Ser Asp Phe Ser Asn Glu Glu Arg Phe
115 120 125

Thr Gly Phe Asp Ala His Tyr Met Ala Val Asp Val Asp Glu Cys Lys
130 135 140

Glu Arg Glu Asp Glu Glu Leu Ser Cys Asp His Tyr Cys His Asn Tyr
145 150 155 160

Ile Gly Gly Tyr Tyr Cys Ser Cys Arg Phe Gly Tyr Ile Leu His Thr
165 170 175

Asp Asn Arg Thr Cys Arg Val Glu Cys Ser Asp Asn Leu Phe Thr Gln
180 185 190

Arg Thr Gly Val Ile Thr Ser Pro Asp Phe Pro Asn Pro Tyr Pro Lys
195 200 205

Ser Ser Glu Cys Leu Tyr Thr Ile Glu Leu Glu Glu Gly Phe Met Val
210 215 220

Asn Leu Gln Phe Glu Asp Ile Phe Asp Ile Glu Asp His Pro Glu Val
225 230 235 240

Pro Cys Pro Tyr Asp Tyr Ile Lys Ile Lys Val Gly Pro Lys Val Leu
245 250 255

Gly Pro Phe Cys Gly Glu Lys Ala Pro Glu Pro Ile Ser Thr Gln Ser
260 265 270

His Ser Val Leu Ile Leu Phe His Ser Asp Asn Ser Gly Glu Asn Arg
275 280 285

Gly Trp Arg Leu Ser Tyr Arg Ala Ala Gly Asn Glu Cys Pro Glu Leu
290 295 300

Gln Pro Pro Val His Gly Lys Ile Glu Pro Ser Gln Ala Lys Tyr Phe
305 310 315 320

Phe Lys Asp Gln Val Leu Val Ser Cys Asp Thr Gly Tyr Lys Val Leu
325 330 335

Lys Asp Asn Val Glu Met Asp Thr Phe Gln Ile Glu Cys Leu Lys Asp
340 345 350

Gly Thr Trp Ser Asn Lys Ile Pro Thr Cys Lys Ile Val Asp Cys Arg
355 360 365

Ala Pro Gly Glu Leu Glu His Gly Leu Ile Thr Phe Ser Thr Arg Asn
370 375 380

Asn Leu Thr Thr Tyr Lys Ser Glu Ile Lys Tyr Ser Cys Gln Glu Pro
385 390 395 400

Tyr Tyr Lys Met Leu Asn Asn Asn Thr Gly Ile Tyr Thr Cys Ser Ala
405 410 415

Gln Gly Val Trp Met Asn Lys Val Leu Gly Arg Ser Leu Pro Thr Cys
420 425 430

Leu Pro Glu Cys Gly Gln Pro Ser Arg Ser Leu Pro Ser Leu Val Lys
435 440 445

Arg Ile Ile Gly Gly Arg Asn Ala Glu Pro Gly Leu Phe Pro Trp Gln
450 455 460

Ala Leu Ile Val Val Glu Asp Thr Ser Arg Val Pro Asn Asp Lys Trp
465 470 475 480

Phe Gly Ser Gly Ala Leu Leu Ser Ala Ser Trp Ile Leu Thr Ala Ala
485 490 495

His Val Leu Arg Ser Gln Arg Arg Asp Thr Thr Val Ile Pro Val Ser
500 505 510

Lys Glu His Val Thr Val Tyr Leu Gly Leu His Asp Val Arg Asp Lys
515 520 525

Ser Gly Ala Val Asn Ser Ser Ala Ala Arg Val Val Leu His Pro Asp
530 535 540

Phe Asn Ile Gln Asn Tyr Asn His Asp Ile Ala Leu Val Gln Leu Gln
545 550 555 560

Glu Pro Val Pro Leu Gly Pro His Val Met Pro Val Cys Leu Pro Arg

565

570

575

Leu Glu Pro Glu Gly Pro Ala Pro His Met Leu Gly Leu Val Ala Gly
580 585 590

Trp Gly Ile Ser Asn Pro Asn Val Thr Val Asp Glu Ile Ile Ser Ser
595 600 605

Gly Thr Arg Thr Leu Ser Asp Val Leu Gln Tyr Val Lys Leu Pro Val
610 615 620

Val Pro His Ala Glu Cys Lys Thr Ser Tyr Glu Ser Arg Ser Gly Asn
625 630 635 640

Tyr Ser Val Thr Glu Asn Met Phe Cys Ala Gly Tyr Tyr Glu Gly Gly
645 650 655

Lys Asp Thr Cys Leu Gly Asp Ser Gly Gly Ala Phe Val Ile Phe Asp
660 665 670

Asp Leu Ser Gln Arg Trp Val Val Gln Gly Leu Val Ser Trp Gly Gly
675 680 685

Pro Glu Glu Cys Gly Ser Lys Gln Val Tyr Gly Val Tyr Thr Lys Val
690 695 700

Ser Asn Tyr Val Asp Trp Val Trp Glu Gln Met Gly Leu Pro Gln Ser
705 710 715 720

Val Val Glu Pro Gln Val Glu Arg
725

<210> 93
<211> 699
<212> PRT
<213> Homo sapiens

<400> 93

Met Arg Trp Leu Leu Tyr Tyr Ala Leu Cys Phe Ser Leu Ser Lys
1 5 10 15

Ala Ser Ala His Thr Val Glu Leu Asn Asn Met Phe Gly Gln Ile Gln
20 25 30

Ser Pro Gly Tyr Pro Asp Ser Tyr Pro Ser Asp Ser Glu Val Thr Trp
35 40 45

Asn Ile Thr Val Pro Asp Gly Phe Arg Ile Lys Leu Tyr Phe Met His
50 55 60

Phe Asn Leu Glu Ser Ser Tyr Leu Cys Glu Tyr Asp Tyr Val Lys Val
65 70 75 80

Glu Thr Glu Asp Gln Val Leu Ala Thr Phe Cys Gly Arg Glu Thr Thr
85 90 95

Asp Thr Glu Gln Thr Pro Gly Gln Glu Val Val Leu Ser Pro Gly Ser
100 105 110

Phe Met Ser Ile Thr Phe Arg Ser Asp Phe Ser Asn Glu Glu Arg Phe
115 120 125

Thr Gly Phe Asp Ala His Tyr Met Ala Val Asp Val Asp Glu Cys Lys
130 135 140

Glu Arg Glu Asp Glu Glu Leu Ser Cys Asp His Tyr Cys His Asn Tyr
145 150 155 160

Ile Gly Gly Tyr Tyr Cys Ser Cys Arg Phe Gly Tyr Ile Leu His Thr
165 170 175

Asp Asn Arg Thr Cys Arg Val Glu Cys Ser Asp Asn Leu Phe Thr Gln
180 185 190

Arg Thr Gly Val Ile Thr Ser Pro Asp Phe Pro Asn Pro Tyr Pro Lys
195 200 205

Ser Ser Glu Cys Leu Tyr Thr Ile Glu Leu Glu Glu Gly Phe Met Val
210 215 220

Asn Leu Gln Phe Glu Asp Ile Phe Asp Ile Glu Asp His Pro Glu Val
225 230 235 240

Pro Cys Pro Tyr Asp Tyr Ile Lys Ile Lys Val Gly Pro Lys Val Leu
245 250 255

Gly Pro Phe Cys Gly Glu Lys Ala Pro Glu Pro Ile Ser Thr Gln Ser
260 265 270

His Ser Val Leu Ile Leu Phe His Ser Asp Asn Ser Gly Glu Asn Arg
275 280 285

Gly Trp Arg Leu Ser Tyr Arg Ala Ala Gly Asn Glu Cys Pro Glu Leu
290 295 300

Gln Pro Pro Val His Gly Lys Ile Glu Pro Ser Gln Ala Lys Tyr Phe
305 310 315 320

Phe Lys Asp Gln Val Leu Val Ser Cys Asp Thr Gly Tyr Lys Val Leu
325 330 335

Lys Asp Asn Val Glu Met Asp Thr Phe Gln Ile Glu Cys Leu Lys Asp
340 345 350

Gly Thr Trp Ser Asn Lys Ile Pro Thr Cys Lys Ile Val Asp Cys Arg
355 360 365

Ala Pro Gly Glu Leu Glu His Gly Leu Ile Thr Phe Ser Thr Arg Asn
370 375 380

Asn Leu Thr Thr Tyr Lys Ser Glu Ile Lys Tyr Ser Cys Gln Glu Pro
385 390 395 400

Tyr Tyr Lys Met Leu Asn Asn Asn Thr Gly Ile Tyr Thr Cys Ser Ala
405 410 415

Gln Gly Val Trp Met Asn Lys Val Leu Gly Arg Ser Leu Pro Thr Cys
420 425 430

Leu Pro Val Cys Gly Leu Pro Lys Phe Ser Arg Lys Leu Met Ala Arg
435 440 445

Ile Phe Asn Gly Arg Pro Ala Gln Lys Gly Thr Thr Pro Trp Ile Ala
450 455 460

Met Leu Ser His Leu Asn Gly Gln Pro Phe Cys Gly Ser Leu Leu
465 470 475 480

Gly Ser Ser Trp Ile Val Thr Ala Ala His Cys Leu His Gln Ser Leu
485 490 495

Asp Pro Glu Asp Pro Thr Leu Arg Asp Ser Asp Leu Leu Ser Pro Ser
500 505 510

Asp Phe Lys Ile Ile Leu Gly Lys His Trp Arg Leu Arg Ser Asp Glu
515 520 525

Asn Glu Gln His Leu Gly Val Lys His Thr Thr Leu His Pro Gln Tyr
530 535 540

Asp Pro Asn Thr Phe Glu Asn Asp Val Ala Leu Val Glu Leu Leu Glu
545 550 555 560

Ser Pro Val Leu Asn Ala Phe Val Met Pro Ile Cys Leu Pro Glu Gly
565 570 575

Pro Gln Gln Glu Gly Ala Met Val Ile Val Ser Gly Trp Gly Lys Gln
580 585 590

Phe Leu Gln Arg Phe Pro Glu Thr Leu Met Glu Ile Glu Ile Pro Ile
595 600 605

Val Asp His Ser Thr Cys Gln Lys Ala Tyr Ala Pro Leu Lys Lys Lys
610 615 620

Val Thr Arg Asp Met Ile Cys Ala Gly Glu Lys Glu Gly Gly Lys Asp
625 630 635 640

Ala Cys Ala Gly Asp Ser Gly Gly Pro Met Val Thr Leu Asn Arg Glu
645 650 655

Arg Gly Gln Trp Tyr Leu Val Gly Thr Val Ser Trp Gly Asp Asp Cys
660 665 670

Gly Lys Lys Asp Arg Tyr Gly Val Tyr Ser Tyr Ile His His Asn Lys
675 680 685

Asp Trp Ile Gln Arg Val Thr Gly Val Arg Asn
690 695

<210> 94
<211> 239
<212> PRT
<213> Mus musculus

<220>

<221> MISC_FEATURE
<222> (91)..(116)
<223> Unknown

<400> 94

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Xaa Xaa Xaa Xaa Xaa Xaa
85 90 95

Xaa
100 105 110

Xaa Xaa Xaa Xaa His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 95
<211> 185
<212> PRT
<213> Oncorhynchus mykiss

<400> 95

Met Glu Lys Leu Ala Ile Leu Leu Leu Ser Ala Ser Ile Ala Leu
1 5 10 15

Gly Asp Ala Asn Leu Thr Gln Leu Leu Gly Leu Glu Pro Leu Leu Lys
20 25 30

Thr Lys Val Glu Gln Thr Thr Pro Glu Ala Gln Val Glu Ala Val Gln
35 40 45

Glu Gly Ile Lys Glu Gly Ser Cys Pro Ser Asp Trp Tyr Thr Tyr Gly
50 55 60

Ser His Cys Phe Lys Phe Val Ser Ile Gln Gln Ser Phe Val Asp Ser
65 70 75 80

Glu Gln Asn Cys Leu Ala Leu Gly Gly Asn Leu Ala Ser Val His Ser
85 90 95

Leu Leu Glu Tyr Gln Phe Met Gln Ala Leu Thr Lys Asp Ala Asn Gly
100 105 110

His Leu His Ser Thr Trp Leu Gly Gly Phe Asp Ala Ile Lys Glu Gly
115 120 125

Thr Trp Met Trp Ser Asp Gly Ser Arg Phe Asp Tyr Thr Asn Trp Asp
130 135 140

Thr Asp Glu Pro Asn Asn Ala Gly Glu Gly Glu Asp Cys Leu His Met
145 150 155 160

Asn Ala Ala Ser Ala Lys Leu Trp Phe Asp Val Pro Cys Glu Trp Lys
165 170 175

Phe Ala Ser Leu Cys Ser Arg Arg Met
180 185

<210> 96
<211> 240
<212> PRT
<213> Sus scrofa

<400> 96

Met Ser Leu Phe Pro Ser Leu His Leu Leu Leu Ile Val Met Thr
1 5 10 15

Ala Ser His Thr Glu Thr Glu Asn Cys Glu Asp Ile Gln Asn Thr Cys
20 25 30

Leu Val Ile Ser Cys Asp Ser Pro Gly Ile Asn Gly Leu Pro Gly Lys
35 40 45

Asp Gly Leu Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly
50 55 60

Leu Ile Gly Leu Gln Gly Leu Pro Gly Met Val Gly Pro Gln Gly Ser
65 70 75 80

Pro Gly Ile Pro Gly Leu Pro Gly Leu Lys Gly Gln Lys Gly Asp Ser
85 90 95

Gly Ile Asp Pro Gly Asn Ser Leu Ala Asn Leu Arg Ser Glu Leu Asp
100 105 110

Asn Ile Lys Lys Trp Leu Ile Phe Ala Gln Gly Lys Gln Val Gly Lys
115 120 125

Lys Leu Tyr Leu Thr Asn Gly Lys Lys Met Ser Phe Asn Gly Val Lys
130 135 140

Ala Leu Cys Ala Gln Phe Gln Ala Ser Val Ala Thr Pro Thr Asn Ser
145 150 155 160

Arg Glu Asn Gln Ala Ile Gln Glu Leu Ala Gly Thr Glu Ala Phe Leu
165 170 175

Gly Ile Thr Asp Glu Tyr Thr Glu Gly Gln Phe Val Asp Leu Thr Gly

180

185

190

Lys Arg Val Arg Tyr Gln Asn Trp Asn Asp Gly Glu Pro Asn Asn Ala
195 200 205

Asp Ser Ala Glu His Cys Val Glu Ile Leu Lys Asp Gly Lys Trp Asn
210 215 220

Asp Ile Phe Cys Ser Ser Gln Leu Ser Ala Val Cys Glu Phe Pro Ala
225 230 235 240

<210> 97
<211> 239
<212> PRT
<213> Mus musculus

<400> 97

Met Leu Leu Leu Pro Leu Leu Pro Val Leu Leu Cys Val Val Ser Val
1 5 10 15

Ser Ser Ser Gly Ser Gln Thr Cys Glu Asp Thr Leu Lys Thr Cys Ser
20 25 30

Val Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys
35 40 45

Gly Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys
50 55 60

Leu Gly Pro Pro Gly Ser Val Gly Ser Pro Gly Ser Pro Gly Pro Lys
65 70 75 80

Gly Gln Lys Gly Asp His Gly Asp Asn Arg Ala Ile Glu Glu Lys Leu
85 90 95

Ala Asn Met Glu Ala Glu Ile Arg Ile Leu Lys Ser Lys Leu Gln Leu
100 105 110

Thr Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys
115 120 125

Leu Phe Val Thr Asn His Glu Lys Met Pro Phe Ser Lys Val Lys Ser
130 135 140

Leu Cys Thr Glu Leu Gln Gly Thr Val Ala Ile Pro Arg Asn Ala Glu
145 150 155 160

Glu Asn Lys Ala Ile Gln Glu Val Ala Thr Gly Ile Ala Phe Leu Gly
165 170 175

Ile Thr Asp Glu Ala Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly
180 185 190

Arg Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asn His Gly
195 200 205

Ser Gly Glu Asp Cys Val Ile Ile Leu Asp Asn Gly Leu Trp Asn Asp
210 215 220

Ile Ser Cys Gln Ala Ser Phe Lys Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 98
<211> 244
<212> PRT
<213> Mus musculus

<400> 98

Met Ser Ile Phe Thr Ser Phe Leu Leu Cys Val Val Thr Val Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Val Gln Asn Ser Cys Pro Val Val
20 25 30

Thr Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly Arg
35 40 45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Thr Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Leu Lys Gly Ala Val Gly Pro Lys Gly Asp Arg Gly Asp Arg
85 90 95

Ala Glu Phe Asp Thr Ser Glu Ile Asp Ser Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Leu Arg Asn Trp Val Leu Phe Ser Leu Ser Glu
115 120 125

Lys Val Gly Lys Lys Tyr Phe Val Ser Ser Val Lys Lys Met Ser Leu
130 135 140

Asp Arg Val Lys Ala Leu Cys Ser Glu Phe Gln Gly Ser Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Ser Ala Ile Gln Lys Val Ala Lys Asp
165 170 175

Ile Ala Tyr Leu Gly Ile Thr Asp Val Arg Val Glu Gly Ser Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Asp Gly Glu
195 200 205

Pro Asn Asn Thr Gly Asp Gly Glu Asp Cys Val Val Ile Leu Gly Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Ala Ile Cys
225 230 235 240

Glu Phe Ser Asp

<210> 99
<211> 381
<212> PRT
<213> Macaca nemestrina

<400> 99

Met Ser Asp Ser Lys Glu Pro Arg Leu Gln Gln Leu Asp Leu Leu Glu
1 5 10 15

Glu Glu Gln Leu Gly Gly Val Gly Phe Arg Gln Thr Arg Gly Tyr Lys
20 25 30

Ser Leu Ala Gly Cys Leu Gly His Gly Pro Leu Val Leu Gln Leu Leu
35 40 45

Ser Phe Thr Leu Leu Ala Gly Leu Leu Val Gln Val Ser Lys Val Pro
50 55 60

Ser Ser Leu Ser Gln Gly Gln Ser Lys Gln Asp Ala Ile Tyr Gln Asn
65 70 75 80

Leu Thr Gln Leu Lys Val Ala Val Ser Glu Leu Ser Glu Lys Ser Lys
85 90 95

Gln Gln Glu Ile Tyr Gln Glu Leu Thr Arg Leu Lys Ala Ala Val Gly
100 105 110

Glu Leu Pro Glu Lys Ser Lys Gln Gln Glu Ile Tyr Glu Glu Leu Thr
115 120 125

Arg Leu Arg Ala Ala Val Gly Glu Leu Pro Glu Lys Ser Lys Leu Gln
130 135 140

Glu Ile Tyr Gln Glu Leu Thr Arg Leu Lys Ala Ala Val Gly Glu Leu
145 150 155 160

Pro Glu Lys Ser Lys Gln Gln Glu Ile Tyr Gln Glu Leu Ser Arg Leu
165 170 175

Lys Ala Ala Val Gly Asp Leu Pro Glu Lys Ser Lys Gln Gln Glu Ile
180 185 190

Tyr Gln Lys Leu Thr Gln Leu Lys Ala Ala Val Asp Gly Leu Pro Asp
195 200 205

Arg Ser Lys Gln Gln Glu Ile Tyr Gln Glu Leu Ile Gln Leu Lys Ala
210 215 220

Ala Val Glu Arg Leu Cys His Pro Cys Pro Trp Glu Trp Thr Phe Phe
225 230 235 240

Gln Gly Asn Cys Tyr Phe Met Ser Asn Ser Gln Arg Asn Trp His Asp
245 250 255

Ser Ile Thr Ala Cys Gln Glu Val Gly Ala Gln Leu Val Val Ile Lys
260 265 270

Ser Ala Glu Glu Gln Asn Phe Leu Gln Leu Gln Ser Ser Arg Ser Asn
275 280 285

Arg Phe Thr Trp Met Gly Leu Ser Asp Leu Asn His Glu Gly Thr Trp
290 295 300

Gln Trp Val Asp Gly Ser Pro Leu Leu Pro Ser Phe Lys Gln Tyr Trp
305 310 315 320

Asn Lys Gly Glu Pro Asn Asn Val Gly Glu Glu Asp Cys Ala Glu Phe
325 330 335

Ser Gly Asn Gly Trp Asn Asp Asp Lys Cys Asn Leu Ala Lys Phe Trp
340 345 350

Ile Cys Lys Lys Ser Ala Ala Ser Cys Ser Gly Asp Glu Glu Arg Leu
355 360 365

Leu Ser Pro Ala Pro Thr Thr Pro Asn Pro Pro Pro Ala
370 375 380

<210> 100
<211> 246
<212> PRT
<213> Carassius auratus

<400> 100

Leu Leu Leu Leu Gln Phe Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro
1 5 10 15

Gln Asn Leu Asn Cys Pro Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly
20 25 30

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala
35 40 45

Ile Gly Pro Lys Gly Glu Lys Gly Glu Ser Gly Val Ser Val Gln Gly
50 55 60

Pro Pro Gly Lys Ala Gly Pro Pro Gly Thr Ala Gly Glu Lys Gly Glu
65 70 75 80

Arg Gly Pro Ser Gly Pro Gln Gly Ser Pro Gly Ser Glu Ser Val Leu
85 90 95

Glu Ser Leu Lys Ser Glu Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr
100 105 110

Phe Glu Lys Val Ser Ser Val Cys His Phe Arg Lys Val Gly Gln Lys
115 120 125

Tyr Tyr Ile Thr Asp Gly Val Val Gly Asn Phe Asp Gln Gly Leu Lys
130 135 140

Ser Cys Met Glu Phe Gly Gly Thr Met Val Ser Pro Arg Thr Ser Ala
145 150 155 160

Glu Asn Gln Ala Leu Leu Lys Leu Val Val Ser Ser Gly Leu Gly Ser
165 170 175

Lys Lys Pro Tyr Ile Gly Val Thr Asp Arg Lys Thr Glu Gly Gln Phe
180 185 190

Val Asp Thr Glu Gly Lys Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly
195 200 205

Gln Pro Asp Asp Tyr Lys Gly Leu Gln Asp Cys Gly Val Ile Glu Asp
210 215 220

Thr Gly Leu Trp Asp Asp Gly Gly Cys Gly Asp Ile Arg Pro Ile Met
225 230 235 240

Cys Glu Ile Asp Ile Lys
245

<210> 101
<211> 251
<212> PRT
<213> Danio rerio

<400> 101

Met Ala Leu Leu Lys Leu Phe Leu Gly Ala Leu Leu Leu Leu Gln Leu
1 5 10 15

Val Leu Gln Leu Met Ala Gly Ala Ala Asp Pro Gln Ser Leu Asn Cys
20 25 30

Pro Ala Tyr Ala Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro
35 40 45

Gly Arg Asp Gly Arg Val Gly Arg Asp Gly Ala Asn Gly Pro Lys Gly
50 55 60

Glu Lys Gly Glu Pro Gly Val Asn Val Gln Gly Pro Pro Gly Lys Ala
65 70 75 80

Gly Pro Pro Gly Pro Ala Gly Ala Lys Gly Glu Arg Gly Pro Ser Gly
85 90 95

Leu Pro Gly Gln Asp Cys Met Ser Asp Ser Leu Lys Ser Glu Leu Gln
100 105 110

Lys Leu Ser Asp Lys Ile Ala Leu Ile Glu Lys Val Val Asn Phe Lys
115 120 125

Thr Phe Lys Lys Val Gly Gln Lys Tyr Tyr Val Thr Asp Asp Val Glu
130 135 140

Glu Thr Phe Asp Lys Gly Met Gln Tyr Cys Ser Ser Asn Gly Gly Ala
145 150 155 160

Leu Val Leu Pro Arg Thr Leu Glu Glu Asn Ala Leu Leu Lys Val Phe
165 170 175

Val Ser Ser Ala Phe Lys Arg Leu Phe Ile Arg Ile Thr Asp Arg Glu
180 185 190

Lys Glu Gly Glu Phe Val Asp Thr Asp Arg Lys Lys Leu Thr Phe Thr
195 200 205

Asn Trp Gly Pro Asn Gln Pro Asp Asn Tyr Lys Gly Ala Gln Asp Cys
210 215 220

Gly Ala Ile Ala Asp Ser Gly Leu Trp Asp Asp Val Ser Cys Asp Ser
225 230 235 240

Leu Tyr Pro Ile Ile Cys Glu Ile Glu Ile Lys
245 250

<210> 102
<211> 256
<212> PRT
<213> Cyprinus carpio

<400> 102

Met Ala Leu Phe Lys Leu Phe Leu Gly Thr Leu Leu Leu Gln Phe

1

5

10

15

Ala Leu Gln Leu Leu Asp Gly Ala Glu Pro Gln Asn Leu Asn Cys Pro
20 25 30

Ala Tyr Gly Gly Val Pro Gly Thr Pro Gly His Asn Gly Leu Pro Gly
35 40 45

Arg Asp Gly Arg Asp Gly Lys Asp Gly Ala Ile Gly Pro Lys Gly Glu
50 55 60

Lys Gly Glu Ser Gly Val Ser Val Gln Gly Pro Pro Gly Lys Ala Gly
65 70 75 80

Pro Pro Gly Pro Ala Gly Glu Lys Gly Glu Arg Gly Pro Thr Gly Ser
85 90 95

Gln Gly Ser Pro Gly Ser Glu Ser Val Leu Glu Ser Leu Lys Ser Glu
100 105 110

Ile Gln Gln Leu Lys Ala Lys Ile Ala Thr Phe Glu Lys Val Ala Ser
115 120 125

Val Gly His Phe Arg Gln Val Gly Gln Lys Tyr Tyr Ile Thr Asp Gly
130 135 140

Val Val Gly Thr Phe Asp Gln Gly Leu Lys Phe Cys Lys Asp Phe Gly
145 150 155 160

Gly Thr Met Val Phe Pro Arg Thr Ser Ala Glu Asn Gln Ala Leu Leu
165 170 175

Lys Leu Val Val Ser Ser Gly Leu Ser Ser Lys Lys Pro Tyr Ile Gly
180 185 190

Val Thr Asp Arg Glu Thr Glu Gly Arg Phe Val Asn Thr Glu Gly Lys
195 200 205

Gln Leu Thr Phe Thr Asn Trp Gly Pro Gly Gln Pro Asp Asp Tyr Lys
210 215 220

Gly Leu Gln Asp Cys Gly Val Ile Glu Asp Ser Gly Leu Trp Asp Asp
225 230 235 240

Gly Ser Cys Gly Asp Ile Arg Pro Ile Met Cys Glu Ile Asp Asn Lys
245 250 255

<210> 103
<211> 31
<212> PRT
<213> Sus scrofa

<400> 103

Thr Lys Gly Glu Lys Gly Glu Pro Gly Pro Gly Phe Arg Gly Ser Gln
1 5 10 15

Gly Pro Pro Gly Lys Met Gly Pro Pro Gly Asn Ile Gly Glu Thr
20 25 30

<210> 104
<211> 254
<212> PRT
<213> Gallus gallus

<400> 104

Met Thr Leu Leu Gln Pro Phe Ser Ala Leu Leu Leu Cys Leu Ser Leu
1 5 10 15

Met Met Ala Thr Ser Leu Leu Thr Thr Asp Lys Pro Glu Glu Lys Met
20 25 30

Tyr Ser Cys Pro Ile Ile Gln Cys Ser Ala Pro Ala Val Asn Gly Leu
35 40 45

Pro Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys Gly Asp Pro
50 55 60

Gly Glu Gly Leu Arg Gly Leu Gln Gly Leu Pro Gly Lys Ala Gly Pro
65 70 75 80

Gln Gly Leu Lys Gly Glu Val Gly Pro Gln Gly Glu Lys Gly Gln Lys
85 90 95

Gly Glu Arg Gly Ile Val Val Thr Asp Asp Leu His Arg Gln Ile Thr
100 105 110

Asp Leu Glu Ala Lys Ile Arg Val Leu Glu Asp Asp Leu Ser Arg Tyr
115 120 125

Lys Lys Ala Leu Ser Leu Lys Asp Val Val Asn Val Gly Lys Lys Met
130 135 140

Phe Val Ser Thr Gly Lys Lys Tyr Asn Phe Glu Lys Gly Lys Ser Leu
145 150 155 160

Cys Ala Lys Ala Gly Ser Val Leu Ala Ser Pro Arg Asn Glu Ala Glu
165 170 175

Asn Thr Ala Leu Lys Asp Leu Ile Asp Pro Ser Ser Gln Ala Tyr Ile
180 185 190

Gly Ile Ser Asp Ala Gln Thr Glu Gly Arg Phe Met Tyr Leu Ser Gly
195 200 205

Gly Pro Leu Thr Tyr Ser Asn Trp Lys Pro Gly Glu Pro Asn Asn His
210 215 220

Lys Asn Glu Asp Cys Ala Val Ile Glu Asp Ser Gly Lys Trp Asn Asp
225 230 235 240

Leu Asp Cys Ser Asn Ser Asn Ile Phe Ile Ile Cys Glu Leu
245 250

<210> 105
<211> 238
<212> PRT
<213> Rattus norvegicus

<400> 105

Met Leu Leu Leu Pro Leu Leu Val Leu Leu Cys Val Val Ser Val Ser
1 5 10 15

Ser Ser Gly Ser Gln Thr Cys Glu Glu Thr Leu Lys Thr Cys Ser Val
20 25 30

Ile Ala Cys Gly Arg Asp Gly Arg Asp Gly Pro Lys Gly Glu Lys Gly
35 40 45

Glu Pro Gly Gln Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu
50 55 60

Gly Pro Pro Gly Ser Val Gly Ala Pro Gly Ser Gln Gly Pro Lys Gly
65 70 75 80

Gln Lys Gly Asp Arg Gly Asp Ser Arg Ala Ile Glu Val Lys Leu Ala
85 90 95

Asn Met Glu Ala Glu Ile Asn Thr Leu Lys Ser Lys Leu Glu Leu Thr
100 105 110

Asn Lys Leu His Ala Phe Ser Met Gly Lys Lys Ser Gly Lys Lys Phe
115 120 125

Phe Val Thr Asn His Glu Arg Met Pro Phe Ser Lys Val Lys Ala Leu
130 135 140

Cys Ser Glu Leu Arg Gly Thr Val Ala Ile Pro Arg Asn Ala Glu Glu
145 150 155 160

Asn Lys Ala Ile Gln Glu Val Ala Lys Thr Ser Ala Phe Leu Gly Ile
165 170 175

Thr Asp Glu Val Thr Glu Gly Gln Phe Met Tyr Val Thr Gly Gly Arg
180 185 190

Leu Thr Tyr Ser Asn Trp Lys Lys Asp Glu Pro Asn Asp His Gly Ser
195 200 205

Gly Glu Asp Cys Val Thr Ile Val Asp Asn Gly Leu Trp Asn Asp Ile
210 215 220

Ser Cys Gln Ala Ser His Thr Ala Val Cys Glu Phe Pro Ala
225 230 235

<210> 106

<211> 244

<212> PRT

<213> Rattus norvegicus

<400> 106

Met Ser Leu Phe Thr Ser Phe Leu Leu Leu Cys Val Leu Thr Ala Val
1 5 10 15

Tyr Ala Glu Thr Leu Thr Glu Gly Ala Gln Ser Ser Cys Pro Val Ile
20 25 30

Ala Cys Ser Ser Pro Gly Leu Asn Gly Phe Pro Gly Lys Asp Gly His

35

40

45

Asp Gly Ala Lys Gly Glu Lys Gly Glu Pro Gly Gln Gly Leu Arg Gly
50 55 60

Leu Gln Gly Pro Pro Gly Lys Val Gly Pro Ala Gly Pro Pro Gly Asn
65 70 75 80

Pro Gly Ser Lys Gly Ala Thr Gly Pro Lys Gly Asp Arg Gly Glu Ser
85 90 95

Val Glu Phe Asp Thr Thr Asn Ile Asp Leu Glu Ile Ala Ala Leu Arg
100 105 110

Ser Glu Leu Arg Ala Met Arg Lys Trp Val Leu Leu Ser Met Ser Glu
115 120 125

Asn Val Gly Lys Lys Tyr Phe Met Ser Ser Val Arg Arg Met Pro Leu
130 135 140

Asn Arg Ala Lys Ala Leu Cys Ser Glu Leu Gln Gly Thr Val Ala Thr
145 150 155 160

Pro Arg Asn Ala Glu Glu Asn Arg Ala Ile Gln Asn Val Ala Lys Asp
165 170 175

Val Ala Phe Leu Gly Ile Thr Asp Gln Arg Thr Glu Asn Val Phe Glu
180 185 190

Asp Leu Thr Gly Asn Arg Val Arg Tyr Thr Asn Trp Asn Glu Gly Glu
195 200 205

Pro Asn Asn Val Gly Ser Gly Glu Asn Cys Val Val Leu Leu Thr Asn
210 215 220

Gly Lys Trp Asn Asp Val Pro Cys Ser Asp Ser Phe Leu Val Val Cys
225 230 235 240

Glu Phe Ser Asp

<210> 107
<211> 248
<212> PRT

<213> Homo sapiens

<400> 107

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 108
<211> 329
<212> PRT
<213> Homo sapiens

<400> 108

Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu
1 5 10 15

Pro Thr Met Tyr Gly Glu Ile Leu Ser Pro Asn Tyr Pro Gln Ala Tyr
20 25 30

Pro Ser Glu Val Glu Lys Ser Trp Asp Ile Glu Val Pro Glu Gly Tyr
35 40 45

Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn
50 55 60

Cys Ala Tyr Asp Ser Val Gln Ile Ile Ser Gly Asp Thr Glu Glu Gly
65 70 75 80

Arg Leu Cys Gly Gln Arg Ser Ser Asn Asn Pro His Ser Pro Ile Val
85 90 95

Glu Glu Phe Gln Val Pro Tyr Asn Lys Leu Gln Val Ile Phe Lys Ser
100 105 110

Asp Phe Ser Asn Glu Glu Arg Phe Thr Gly Phe Ala Ala Tyr Tyr Val
115 120 125

Ala Thr Asp Ile Asn Glu Cys Thr Asp Phe Val Asp Val Pro Cys Ser
130 135 140

His Phe Cys Asn Asn Phe Ile Gly Gly Tyr Phe Cys Ser Cys Pro Pro
145 150 155 160

Glu Tyr Phe Leu His Asp Asp Met Lys Asn Cys Gly Val Asn Cys Ser

165

170

175

Gly Asp Val Phe Thr Ala Leu Ile Gly Glu Ile Ala Ser Pro Asn Tyr
180 185 190

Pro Lys Pro Tyr Pro Glu Asn Ser Arg Cys Glu Tyr Gln Ile Arg Leu
195 200 205

Glu Lys Gly Phe Gln Val Val Val Thr Leu Arg Arg Glu Asp Phe Asp
210 215 220

Val Glu Ala Ala Asp Ser Ala Gly Asn Cys Leu Asp Ser Leu Val Phe
225 230 235 240

Val Ala Gly Asp Arg Gln Phe Gly Pro Tyr Cys Gly His Gly Phe Pro
245 250 255

Gly Pro Leu Asn Ile Glu Thr Lys Ser Asn Ala Leu Asp Ile Ile Phe
260 265 270

Gln Thr Asp Leu Thr Gly Gln Lys Lys Gly Trp Lys Leu Arg Tyr His
275 280 285

Gly Asp Pro Met Pro Cys Pro Lys Glu Asp Thr Pro Asn Ser Val Trp
290 295 300

Glu Pro Ala Lys Ala Lys Tyr Val Phe Arg Asp Val Val Gln Ile Thr
305 310 315 320

Cys Leu Asp Gly Phe Glu Val Val Glu
325

<210> 109
<211> 109
<212> PRT
<213> Aloe arborescens

<400> 109

Asp Asn Ile Leu Tyr Ser Ser Glu Val Leu His Glu Asn Gln Tyr Ile
1 5 10 15

Ser Tyr Gly Pro Tyr Glu Phe Ile Met Gln His Asp Cys Asn Leu Val
20 25 30

Leu Tyr Glu Ser Gly Asn Pro Thr Trp Ala Ser Asn Thr Gly Gly Leu
35 40 45 /

Ala Leu His Cys Arg Ala Thr Leu Gln Thr Asp Gly Asn Leu Val Val
50 55 60

Gln Asn Ser Ala Asn Arg Ile Ile Trp Gln Ser Asn Thr Gly Thr Gly
65 70 75 80

Thr Asn Gly Asp Tyr Leu Leu Val Leu Gln Lys Asn Gly Asn Val Val
85 90 95

Ile Val Gly Pro Pro Ile Trp Ala Thr Gly Thr Gly Arg
100 105

<210> 110

<211> 248

<212> PRT

<213> Homo sapiens

<400> 110

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Cys Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 111
<211> 248
<212> PRT
<213> Homo sapiens

<400> 111

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 112
<211> 248
<212> PRT
<213> Homo sapiens

<400> 112

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys

20

25

30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 113
<211> 248
<212> PRT
<213> Homo sapiens

<400> 113

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Asp Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 114
<211> 248
<212> PRT
<213> Homo sapiens

<400> 114

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Glu Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala

145

150

155

160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 115

<211> 248

<212> PRT

<213> Homo sapiens

<400> 115

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 116
<211> 248
<212> PRT
<213> Homo sapiens

<400> 116

Met Ser Leu Phe Pro Ser Leu Pro Leu Leu Leu Ser Met Val Ala
1 5 10 15

Ala Ser Tyr Ser Glu Thr Val Thr Cys Glu Asp Ala Gln Lys Thr Cys
20 25 30

Pro Ala Val Ile Ala Cys Ser Ser Pro Gly Ile Asn Gly Phe Pro Gly
35 40 45

Lys Asp Gly Arg Asp Gly Thr Lys Gly Glu Lys Gly Glu Pro Gly Gln
50 55 60

Gly Leu Arg Gly Leu Gln Gly Pro Pro Gly Lys Leu Gly Pro Pro Gly
65 70 75 80

Asn Pro Gly Pro Ser Gly Ser Pro Gly Pro Lys Gly Gln Lys Gly Asp
85 90 95

Pro Gly Lys Ser Pro Asp Gly Asp Ser Ser Leu Ala Ala Ser Glu Arg
100 105 110

Lys Ala Leu Gln Thr Glu Met Ala Arg Ile Lys Lys Trp Leu Thr Phe
115 120 125

Ser Leu Gly Lys Gln Val Gly Asn Lys Phe Phe Leu Thr Asn Gly Glu
130 135 140

Ile Met Thr Phe Glu Lys Val Lys Ala Leu Cys Val Lys Phe Gln Ala
145 150 155 160

Ser Val Ala Thr Pro Arg Asn Ala Ala Glu Asn Gly Ala Ile Gln Asn
165 170 175

Leu Ile Lys Glu Glu Ala Phe Leu Gly Ile Thr Asp Glu Lys Thr Glu
180 185 190

Gly Gln Phe Val Asp Leu Thr Gly Asn Arg Leu Thr Tyr Thr Asn Trp
195 200 205

Asn Glu Gly Glu Pro Asn Asn Ala Gly Ser Asp Glu Asp Cys Val Leu
210 215 220

Leu Leu Lys Asn Gly Gln Trp Asn Asp Val Pro Cys Ser Thr Ser His
225 230 235 240

Leu Ala Val Cys Glu Phe Pro Ile
245

<210> 117
<211> 652
<212> PRT
<213> Homo sapiens

<400> 117

Met Ala Thr Ser Met Gly Leu Leu Leu Leu Leu Leu Leu Leu Thr
1 5 10 15

Gln Pro Gly Ala Gly Thr Gly Ala Asp Thr Glu Ala Val Val Cys Val
20 25 30

Gly Thr Ala Cys Tyr Thr Ala His Ser Gly Lys Leu Ser Ala Ala Glu
35 40 45

Ala Gln Asn His Cys Asn Gln Asn Gly Gly Asn Leu Ala Thr Val Lys
50 55 60

Ser Lys Glu Glu Ala Gln His Val Gln Arg Val Leu Ala Gln Leu Leu
65 70 75 80

Arg Arg Glu Ala Ala Leu Thr Ala Arg Met Ser Lys Phe Trp Ile Gly
85 90 95

Leu Gln Arg Glu Lys Gly Lys Cys Leu Asp Pro Ser Leu Pro Leu Lys
100 105 110

Gly Phe Ser Trp Val Gly Gly Glu Asp Thr Pro Tyr Ser Asn Trp
115 120 125

His Lys Glu Leu Arg Asn Ser Cys Ile Ser Lys Arg Cys Val Ser Leu
130 135 140

Leu Leu Asp Leu Ser Gln Pro Leu Leu Pro Asn Arg Leu Pro Lys Trp
145 150 155 160

Ser Glu Gly Pro Cys Gly Ser Pro Gly Ser Pro Gly Ser Asn Ile Glu
165 170 175

Gly Phe Val Cys Lys Phe Ser Phe Lys Gly Met Cys Arg Pro Leu Ala
180 185 190

Leu Gly Gly Pro Gly Gln Val Thr Tyr Thr Thr Pro Phe Gln Thr Thr
195 200 205

Ser Ser Ser Leu Glu Ala Val Pro Phe Ala Ser Ala Ala Asn Val Ala
210 215 220

Cys Gly Glu Gly Asp Lys Asp Glu Thr Gln Ser His Tyr Phe Leu Cys
225 230 235 240

Lys Glu Lys Ala Pro Asp Val Phe Asp Trp Gly Ser Ser Gly Pro Leu
245 250 255

Cys Val Ser Pro Lys Tyr Gly Cys Asn Phe Asn Asn Gly Gly Cys His
260 265 270

Gln Asp Cys Phe Glu Gly Gly Asp Gly Ser Phe Leu Cys Gly Cys Arg
275 280 285

Pro Gly Phe Arg Leu Leu Asp Asp Leu Val Thr Cys Ala Ser Arg Asn
290 295 300

Pro Cys Ser Ser Ser Pro Cys Arg Gly Gly Ala Thr Cys Val Leu Gly
305 310 315 320

Pro His Gly Lys Asn Tyr Thr Cys Arg Cys Pro Gln Gly Tyr Gln Leu
325 330 335

Asp Ser Ser Gln Leu Asp Cys Val Asp Val Asp Glu Cys Gln Asp Ser
340 345 350

Pro Cys Ala Gln Glu Cys Val Asn Thr Pro Gly Gly Phe Arg Cys Glu
355 360 365

Cys Trp Val Gly Tyr Glu Pro Gly Gly Pro Gly Glu Gly Ala Cys Gln
370 375 380

Asp Val Asp Glu Cys Ala Leu Gly Arg Ser Pro Cys Ala Gln Gly Cys
385 390 395 400

Thr Asn Thr Asp Gly Ser Phe His Cys Ser Cys Glu Glu Gly Tyr Val
405 410 415

Leu Ala Gly Glu Asp Gly Thr Gln Cys Gln Asp Val Asp Glu Cys Val
420 425 430

Gly Pro Gly Gly Pro Leu Cys Asp Ser Leu Cys Phe Asn Thr Gln Gly
435 440 445

Ser Phe His Cys Gly Cys Leu Pro Gly Trp Val Leu Ala Pro Asn Gly
450 455 460

Val Ser Cys Thr Met Gly Pro Val Ser Leu Gly Pro Pro Ser Gly Pro
465 470 475 480

Pro Asp Glu Glu Asp Lys Gly Glu Lys Glu Gly Ser Thr Val Pro Arg
485 490 495

Ala Ala Thr Ala Ser Pro Thr Arg Gly Pro Glu Gly Thr Pro Lys Ala
500 505 510

Thr Pro Thr Thr Ser Arg Pro Ser Leu Ser Ser Asp Ala Pro Ile Thr
515 520 525

Ser Ala Pro Leu Lys Met Leu Ala Pro Ser Gly Ser Ser Gly Val Trp
530 535 540

Arg Glu Pro Ser Ile His His Ala Thr Ala Ala Ser Gly Pro Gln Glu
545 550 555 560

Pro Ala Gly Gly Asp Ser Ser Val Ala Thr Gln Asn Asn Asp Gly Thr
565 570 575

Asp Gly Gln Lys Leu Leu Leu Phe Tyr Ile Leu Gly Thr Val Val Ala
580 585 590

Ile Leu Leu Leu Ala Leu Ala Leu Gly Leu Leu Val Tyr Arg Lys
595 600 605

Arg Arg Ala Lys Arg Glu Glu Lys Lys Glu Lys Lys Pro Gln Asn Ala
610 615 620

Ala Asp Ser Tyr Ser Trp Val Pro Glu Arg Ala Glu Ser Arg Ala Met
625 630 635 640

Glu Asn Gln Tyr Ser Pro Thr Pro Gly Thr Asp Cys
645 650

<210> 118
<211> 299
<212> PRT
<213> Homo sapiens

<400> 118

Met Asp Leu Leu Trp Ile Leu Pro Ser Leu Trp Leu Leu Leu Gly

1

5

10

15

Gly Pro Ala Cys Leu Lys Thr Gln Glu His Pro Ser Cys Pro Gly Pro
20 25 30

Arg Glu Leu Glu Ala Ser Lys Val Val Leu Leu Pro Ser Cys Pro Gly
35 40 45

Ala Pro Gly Ser Pro Gly Glu Lys Gly Ala Pro Gly Pro Gln Gly Pro
50 55 60

Pro Gly Pro Pro Gly Lys Met Gly Pro Lys Gly Glu Pro Gly Asp Pro
65 70 75 80

Val Asn Leu Leu Arg Cys Gln Glu Gly Pro Arg Asn Cys Arg Glu Leu
85 90 95

Leu Ser Gln Gly Ala Thr Leu Ser Gly Trp Tyr His Leu Cys Leu Pro
100 105 110

Glu Gly Arg Ala Leu Pro Val Phe Cys Asp Met Asp Thr Glu Gly Gly
115 120 125

Gly Trp Leu Val Phe Gln Arg Arg Gln Asp Gly Ser Val Asp Phe Phe
130 135 140

Arg Ser Trp Ser Ser Tyr Arg Ala Gly Phe Gly Asn Gln Glu Ser Glu
145 150 155 160

Phe Trp Leu Gly Asn Glu Asn Leu His Gln Leu Thr Leu Gln Gly Asn
165 170 175

Trp Glu Leu Arg Val Glu Leu Glu Asp Phe Asn Gly Asn Arg Thr Phe
180 185 190

Ala His Tyr Ala Thr Phe Arg Leu Leu Gly Glu Val Asp His Tyr Gln
195 200 205

Leu Ala Leu Gly Lys Phe Ser Glu Gly Thr Ala Gly Asp Ser Leu Ser
210 215 220

Leu His Ser Gly Arg Pro Phe Thr Thr Tyr Asp Ala Asp His Asp Ser
225 230 235 240

Ser Asn Ser Asn Cys Ala Val Ile Val His Gly Ala Trp Trp Tyr Ala
245 250 255

Ser Cys Tyr Arg Ser Asn Leu Asn Gly Arg Tyr Ala Val Ser Asp Ala
260 265 270

Ala Ala His Lys Tyr Gly Ile Asp Trp Ala Ser Gly Arg Gly Val Gly
275 280 285

His Pro Tyr Arg Arg Val Arg Met Met Leu Arg
290 295

<210> 119
<211> 169
<212> PRT
<213> Homo sapiens

<400> 119

Met Gly Pro Ala Leu Leu Ala Leu Ser Phe Leu Trp Thr Met Ala Leu
1 5 10 15

Thr Glu Asp Thr Cys Pro Ala Met Leu Glu Tyr Val Ala Leu Asn Ser
20 25 30

Glu Pro Gly Met Ala Ser Lys Asn Pro Ser Arg Arg His Gly Leu Ser
35 40 45

Leu Leu Val Val Asp Gln Gly Pro Gly Ala Arg Gly Val Arg Thr Asp
50 55 60

Gln Gly Pro Ser Gly Ala Asp Pro Gly Ser Leu Glu Leu His Gly Glu
65 70 75 80

Cys Pro Ile Phe Pro Ser Glu Gln Val Ile Leu Thr His His Asn Asn
85 90 95

Tyr Pro Phe Ser Thr Glu Asp Gln Asp Asn Asp Arg Asp Ala Glu Asn
100 105 110

Cys Ala Val His Tyr Gln Gly Ala Trp Trp Tyr Ala Ser Cys His Leu
115 120 125

Ser His Leu Asn Gly Val Tyr Leu Gly Gly Ala Arg Asp Ser Phe Thr
130 135 140

Asn Gly Ile Asn Trp Lys Ser Gly Lys Gly Asn Asn Tyr Ser Tyr Lys
145 150 155 160

Val Ser Glu Met Lys Val Arg Pro Thr
165

<210> 120
<211> 326
<212> PRT
<213> Homo sapiens

<400> 120

Met Glu Leu Ser Gly Ala Thr Met Ala Arg Gly Leu Ala Val Leu Leu
1 5 10 15

Val Leu Phe Leu His Ile Lys Asn Leu Pro Ala Gln Ala Ala Asp Thr
20 25 30

Cys Pro Glu Val Lys Val Val Gly Leu Glu Gly Ser Asp Lys Leu Thr
35 40 45

Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Pro Lys Gly
50 55 60

Glu Ala Gly Val Ile Gly Glu Arg Gly Glu Arg Gly Leu Pro Gly Ala
65 70 75 80

Pro Gly Lys Ala Gly Pro Val Gly Pro Lys Gly Asp Arg Gly Glu Lys
85 90 95

Gly Met Arg Gly Glu Lys Gly Asp Ala Gly Gln Ser Gln Ser Cys Ala
100 105 110

Thr Gly Pro Arg Asn Cys Lys Asp Leu Leu Asp Arg Gly Tyr Phe Leu
115 120 125

Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val
130 135 140

Leu Cys Asp Met Asp Thr Asp Gly Gly Trp Thr Val Phe Gln Arg
145 150 155 160

Arg Met Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys

165

170

175

Gln Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn
180 185 190

Ile His Ala Leu Thr Ala Gln Gly Ser Ser Glu Leu Arg Val Asp Leu
195 200 205

Val Asp Phe Glu Gly Asn His Gln Phe Ala Lys Tyr Lys Ser Phe Lys
210 215 220

Val Ala Asp Glu Ala Glu Lys Tyr Lys Leu Val Leu Gly Ala Phe Val
225 230 235 240

Gly Gly Ser Ala Gly Asn Ser Leu Thr Gly His Asn Asn Asn Phe Phe
245 250 255

Ser Thr Lys Asp Gln Asp Asn Asp Val Ser Ser Ser Asn Cys Ala Glu
260 265 270

Lys Phe Gln Gly Ala Trp Trp Tyr Ala Asp Cys His Ala Ser Asn Leu
275 280 285

Asn Gly Leu Tyr Leu Met Gly Pro His Glu Ser Tyr Ala Asn Gly Ile
290 295 300

Asn Trp Ser Ala Ala Lys Gly Tyr Lys Tyr Ser Tyr Lys Val Ser Glu
305 310 315 320

Met Lys Val Arg Pro Ala
325

<210> 121
<211> 299
<212> PRT
<213> Homo sapiens

<400> 121

Met Asp Leu Leu Trp Ile Leu Pro Ser Leu Trp Leu Leu Leu Gly
1 5 10 15

Gly Pro Ala Cys Leu Lys Thr Gln Glu His Pro Ser Cys Pro Gly Pro
20 25 30

Arg Glu Leu Glu Ala Ser Lys Val Val Leu Leu Pro Ser Cys Pro Gly
35 40 45

Ala Pro Gly Ser Pro Gly Glu Lys Gly Ala Pro Gly Pro Gln Gly Pro
50 55 60

Pro Gly Pro Pro Gly Lys Met Gly Pro Lys Gly Glu Pro Gly Asp Pro
65 70 75 80

Val Asn Leu Leu Arg Cys Gln Glu Gly Pro Arg Asn Cys Arg Glu Leu
85 90 95

Leu Ser Gln Gly Ala Thr Leu Ser Gly Trp Tyr His Leu Cys Leu Pro
100 105 110

Glu Gly Arg Ala Leu Pro Val Phe Cys Asp Met Asp Thr Glu Gly Gly
115 120 125

Gly Trp Leu Val Phe Gln Arg Arg Gln Asp Gly Ser Val Asp Phe Phe
130 135 140

Arg Ser Trp Ser Ser Tyr Arg Ala Gly Phe Gly Asn Gln Glu Ser Glu
145 150 155 160

Phe Trp Leu Gly Asn Glu Asn Leu His Gln Leu Thr Leu Gln Gly Asn
165 170 175

Trp Glu Leu Arg Val Glu Leu Glu Asp Phe Asn Gly Asn Arg Thr Phe
180 185 190

Ala His Tyr Ala Thr Phe Arg Leu Leu Gly Glu Val Asp His Tyr Gln
195 200 205

Leu Ala Leu Gly Lys Phe Ser Glu Gly Thr Ala Gly Asp Ser Leu Ser
210 215 220

Leu His Ser Gly Arg Pro Phe Thr Thr Tyr Asp Ala Asp His Asp Ser
225 230 235 240

Ser Asn Ser Asn Cys Ala Val Ile Val His Gly Ala Trp Trp Tyr Ala
245 250 255

Ser Cys Tyr Arg Ser Asn Leu Asn Gly Arg Tyr Ala Val Ser Asp Ala
260 265 270

Ala Ala His Lys Tyr Gly Ile Asp Trp Ala Ser Gly Arg Gly Val Gly
275 280 285

His Pro Tyr Arg Arg Val Arg Met Met Leu Arg
290 295

<210> 122
<211> 314
<212> PRT
<213> Mus musculus

<400> 122

Met Ala Leu Gly Ser Ala Ala Leu Phe Val Leu Thr Leu Thr Val His
1 5 10 15

Ala Ala Gly Thr Cys Pro Glu Leu Lys Val Leu Asp Leu Glu Gly Tyr
20 25 30

Lys Gln Leu Thr Ile Leu Gln Gly Cys Pro Gly Leu Pro Gly Ala Ala
35 40 45

Gly Pro Lys Gly Glu Ala Gly Ala Lys Gly Asp Arg Gly Glu Ser Gly
50 55 60

Leu Pro Gly Ile Pro Gly Lys Glu Gly Pro Thr Gly Pro Lys Gly Asn
65 70 75 80

Gln Gly Glu Lys Gly Ile Arg Gly Glu Lys Gly Asp Ser Gly Pro Ser
85 90 95

Gln Ser Cys Ala Thr Gly Pro Arg Thr Cys Lys Glu Leu Leu Thr Gln
100 105 110

Gly His Phe Leu Thr Gly Trp Tyr Thr Ile Tyr Leu Pro Asp Cys Arg
115 120 125

Pro Leu Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Trp Thr
130 135 140

Val Phe Gln Arg Arg Leu Asp Gly Ser Val Asp Phe Phe Arg Asp Trp
145 150 155 160

Thr Ser Tyr Lys Arg Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu

165

170

175

Gly Asn Asp Asn Ile His Ala Leu Thr Thr Gln Gly Thr Ser Glu Leu
180 185 190

Arg Val Asp Leu Ser Asp Phe Glu Gly Lys His Asp Phe Ala Lys Tyr
195 200 205

Ser Ser Phe Gln Ile Gln Gly Glu Ala Glu Lys Tyr Lys Leu Ile Leu
210 215 220

Gly Asn Phe Leu Gly Gly Ala Gly Asp Ser Leu Thr Pro His Asn
225 230 235 240

Asn Arg Leu Phe Ser Thr Lys Asp Gln Asp Asn Asp Gly Ser Thr Ser
245 250 255

Ser Cys Ala Met Gly Tyr His Gly Ala Trp Trp Tyr Ser Gln Cys His
260 265 270

Thr Ser Asn Leu Asn Gly Leu Tyr Leu Arg Gly Pro His Lys Ser Tyr
275 280 285

Ala Asn Gly Val Asn Trp Lys Ser Trp Arg Gly Tyr Asn Tyr Ser Cys
290 295 300

Lys Val Ser Glu Met Lys Val Arg Leu Ile
305 310

<210> 123
<211> 102
<212> PRT
<213> Homo sapiens

<400> 123

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Asp
100

<210> 124

<211> 182

<212> PRT

<213> Homo sapiens

<400> 124

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Pro Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly
100 105 110

His Phe Leu Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro
115 120 125

Leu Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Trp Thr Val
130 135 140

Ser Val Gly Leu Gly Arg Gly Gly Gln Pro Gly Ser Pro Gly Gly Gln
145 150 155 160

Ala Ala His Leu Val Gly Glu His Thr Leu Glu Phe Ser Ile Leu Leu
165 170 175

Val Gly Asp Ser Gln Arg
180

<210> 125

<211> 275

<212> PRT

<213> Homo sapiens

<400> 125

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Gly Glu Arg Gly Pro Pro Gly Pro Pro Gly Lys Ala Gly Pro Pro
35 40 45

Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln Pro Cys Leu Thr Gly Pro
50 55 60

Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly His Phe Leu Ser Gly Trp
65 70 75 80

His Thr Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp
85 90 95

Met Asp Thr Asp Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp
100 105 110

Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Thr Tyr Lys Gln Gly Phe
115 120 125

Gly Ser Arg Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn Ile His Ala
130 135 140

Leu Thr Ala Gln Gly Thr Ser Glu Leu Arg Val Asp Leu Val Asp Phe
145 150 155 160

Glu Asp Asn Tyr Gln Phe Ala Lys Tyr Arg Ser Phe Lys Val Ala Asp
165 170 175

Glu Ala Glu Lys Tyr Asn Leu Val Leu Gly Ala Phe Val Glu Gly Ser
180 185 190

Ala Gly Asp Ser Leu Thr Phe His Asn Asn Gln Ser Phe Ser Thr Lys
195 200 205

Asp Gln Asp Asn Asp Leu Asn Thr Gly Asn Cys Ala Val Met Phe Gln
210 215 220

Gly Ala Trp Trp Tyr Lys Asn Cys His Val Ser Asn Leu Asn Gly Arg
225 230 235 240

Tyr Leu Arg Gly Thr His Gly Ser Phe Ala Asn Gly Ile Asn Trp Lys
245 250 255

Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys Val Ser Glu Met Lys Val
260 265 270

Arg Pro Ala
275

<210> 126
<211> 326
<212> PRT
<213> Homo sapiens

<400> 126

Met Glu Leu Ser Gly Ala Thr Met Ala Arg Gly Leu Ala Val Leu Leu
1 5 10 15

Val Leu Phe Leu His Ile Lys Asn Leu Pro Ala Gln Ala Ala Asp Thr
20 25 30

Cys Pro Glu Val Lys Val Val Gly Leu Glu Gly Ser Asp Lys Leu Thr
35 40 45

Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Pro Lys Gly
50 55 60

Glu Ala Gly Val Ile Gly Glu Arg Gly Glu Arg Gly Leu Pro Gly Ala

65

70

75

80

Pro Gly Lys Ala Gly Pro Val Gly Pro Lys Gly Asp Arg Gly Glu Lys
85 90 95

Gly Met Arg Gly Glu Lys Gly Asp Ala Gly Gln Ser Gln Ser Cys Ala
100 105 110

Thr Gly Pro Arg Asn Cys Lys Asp Leu Leu Asp Arg Gly Tyr Phe Leu
115 120 125

Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val
130 135 140

Leu Cys Asp Met Asp Thr Asp Gly Gly Trp Thr Val Phe Gln Arg
145 150 155 160

Arg Met Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys
165 170 175

Gln Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn
180 185 190

Ile His Ala Leu Thr Ala Gln Gly Ser Ser Glu Leu Arg Val Asp Leu
195 200 205

Val Asp Phe Glu Gly Asn His Gln Phe Ala Lys Tyr Lys Ser Phe Lys
210 215 220

Val Ala Asp Glu Ala Glu Lys Tyr Lys Leu Val Leu Gly Ala Phe Val
225 230 235 240

Gly Gly Ser Ala Gly Asn Ser Leu Thr Gly His Asn Asn Asn Phe Phe
245 250 255

Ser Thr Lys Asp Gln Asp Asn Asp Val Ser Ser Asn Cys Ala Glu
260 265 270

Lys Phe Gln Gly Ala Trp Trp Tyr Ala Asp Cys His Ala Ser Asn Leu
275 280 285

Asn Gly Leu Tyr Leu Met Gly Pro His Glu Ser Tyr Ala Asn Gly Ile
290 295 300

Asn Trp Ser Ala Ala Lys Gly Tyr Lys Tyr Ser Tyr Lys Val Ser Glu
305 310 315 320

Met Lys Val Arg Pro Ala
325

<210> 127
<211> 313
<212> PRT
<213> Homo sapiens

<400> 127

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Asn Asp Asn Ile His Ala Leu Thr Ala Gln Gly Thr Ser Glu Leu Arg
180 185 190

Val Asp Leu Val Asp Phe Glu Asp Asn Tyr Gln Phe Ala Lys Tyr Arg
195 200 205

Ser Phe Lys Val Ala Asp Glu Ala Glu Lys Tyr Asn Leu Val Leu Gly
210 215 220

Ala Phe Val Glu Gly Ser Ala Gly Asp Ser Leu Thr Phe His Asn Asn
225 230 235 240

Gln Ser Phe Ser Thr Lys Asp Gln Asp Asn Asp Leu Asn Thr Gly Asn
245 250 255

Cys Ala Val Met Phe Gln Gly Ala Trp Trp Tyr Lys Asn Cys His Val
260 265 270

Ser Asn Leu Asn Gly Arg Tyr Leu Arg Gly Thr His Gly Ser Phe Ala
275 280 285

Asn Gly Ile Asn Trp Lys Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys
290 295 300

Val Ser Glu Met Lys Val Arg Pro Ala
305 310

<210> 128
<211> 335
<212> PRT
<213> Rattus norvegicus

<400> 128

Met Trp Trp Pro Met Leu Trp Ala Phe Pro Val Leu Leu Cys Leu Cys
1 5 10 15

Ser Ser Gln Ala Leu Gly Gln Glu Ser Gly Ala Cys Pro Asp Val Lys
20 25 30

Ile Val Gly Leu Gly Ala Gln Asp Lys Val Ala Val Ile Gln Ser Cys
35 40 45

Pro Ser Phe Pro Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Ser Pro

50

55

60

Ala Gly Arg Gly Glu Arg Gly Leu Gln Gly Ser Pro Gly Lys Met Gly
65 70 75 80

Pro Pro Gly Ser Lys Gly Glu Pro Gly Thr Met Gly Pro Pro Gly Val
85 90 95

Lys Gly Glu Lys Gly Glu Arg Gly Thr Ala Ser Pro Leu Gly Gln Lys
100 105 110

Glu Leu Gly Asp Ala Leu Cys Arg Arg Gly Pro Arg Ser Cys Lys Asp
115 120 125

Leu Leu Thr Arg Gly Ile Phe Leu Thr Gly Trp Tyr Thr Ile Tyr Leu
130 135 140

Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Val Asp Gly
145 150 155 160

Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp Gly Ser Ile Asn Phe
165 170 175

Tyr Arg Asp Trp Asp Ser Tyr Lys Arg Gly Phe Gly Asn Leu Gly Thr
180 185 190

Glu Phe Trp Leu Gly Asn Asp Tyr Leu His Leu Leu Thr Ala Asn Gly
195 200 205

Asn Gln Glu Leu Arg Val Asp Leu Arg Glu Phe Gln Gly Gln Thr Ser
210 215 220

Phe Ala Lys Tyr Ser Ser Phe Gln Val Ser Gly Glu Gln Glu Lys Tyr
225 230 235 240

Lys Leu Thr Leu Gly Gln Phe Leu Glu Gly Thr Ala Gly Asp Ser Leu
245 250 255

Thr Lys His Asn Asn Met Ala Phe Ser Thr His Asp Gln Asp Asn Asp
260 265 270

Thr Asn Gly Gly Lys Asn Cys Ala Ala Leu Phe His Gly Ala Trp Trp
275 280 285

Tyr His Asp Cys His Gln Ser Asn Leu Asn Gly Arg Tyr Leu Pro Gly
290 295 300

Ser His Glu Ser Tyr Ala Asp Gly Ile Asn Trp Leu Ser Gly Arg Gly
305 310 315 320

His Arg Tyr Ser Tyr Lys Val Ala Glu Met Lys Ile Arg Ala Ser
325 330 335

<210> 129
<211> 313
<212> PRT
<213> Homo sapiens

<400> 129

Met Glu Leu Asp Arg Ala Val Gly Val Leu Gly Ala Ala Thr Leu Leu
1 5 10 15

Leu Ser Phe Leu Gly Met Ala Trp Ala Leu Gln Ala Ala Asp Thr Cys
20 25 30

Pro Glu Val Lys Met Val Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile
35 40 45

Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Asp Lys Gly Glu
50 55 60

Ala Gly Thr Asn Gly Lys Arg Gly Glu Arg Gly Pro Pro Gly Pro Pro
65 70 75 80

Gly Lys Ala Gly Pro Pro Gly Pro Asn Gly Ala Pro Gly Glu Pro Gln
85 90 95

Pro Cys Leu Thr Gly Pro Arg Thr Cys Lys Asp Leu Leu Asp Arg Gly
100 105 110

His Phe Leu Ser Gly Trp His Thr Ile Tyr Leu Pro Asp Cys Arg Pro
115 120 125

Leu Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Trp Thr Val
130 135 140

Phe Gln Arg Arg Val Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala
145 150 155 160

Thr Tyr Lys Gln Gly Phe Gly Ser Arg Leu Gly Glu Phe Trp Leu Gly
165 170 175

Asn Asp Asn Ile His Ala Leu Thr Ala Gln Gly Thr Ser Glu Leu Arg
180 185 190

Val Asp Leu Val Asp Phe Glu Asp Asn Tyr Gln Phe Ala Lys Tyr Arg
195 200 205

Ser Phe Lys Val Ala Asp Glu Ala Glu Lys Tyr Asn Leu Val Leu Gly
210 215 220

Ala Phe Val Glu Gly Ser Ala Gly Asp Ser Leu Thr Phe His Asn Asn
225 230 235 240

Gln Ser Phe Ser Thr Lys Asp Gln Asp Asn Asp Leu Asn Thr Gly Asn
245 250 255

Cys Ala Val Met Phe Gln Gly Ala Trp Trp Tyr Lys Asn Cys His Val
260 265 270

Ser Asn Leu Asn Gly Arg Tyr Leu Arg Gly Thr His Gly Ser Phe Ala
275 280 285

Asn Gly Ile Asn Trp Lys Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys
290 295 300

Val Ser Glu Met Lys Val Arg Pro Ala
305 310

<210> 130
<211> 306
<212> PRT
<213> Mus musculus

<400> 130

Leu Gly Ser Ala Ala Leu Phe Val Leu Thr Leu Thr Val His Ala Ala
1 5 10 15

Gly Thr Cys Pro Glu Leu Lys Val Leu Asp Leu Glu Gly Tyr Lys Gln
20 25 30

Leu Thr Ile Leu Gln Gly Cys Pro Gly Leu Pro Gly Ala Ala Gly Pro

35

40

45

Lys Gly Glu Ala Gly Ala Lys Gly Asp Arg Gly Glu Ser Gly Leu Pro
50 55 60

Gly Ile Pro Gly Lys Glu Gly Pro Thr Gly Pro Lys Gly Asn Gln Gly
65 70 75 80

Glu Lys Gly Ile Arg Gly Glu Lys Gly Asp Ser Gly Pro Ser Gln Ser
85 90 95

Cys Ala Thr Gly Pro Arg Thr Cys Lys Glu Leu Leu Thr Gln Gly His
100 105 110

Phe Leu Thr Gly Trp Tyr Thr Ile Tyr Leu Pro Asp Cys Arg Pro Met
115 120 125

Thr Val Leu Cys Asp Met Asp Thr Asp Gly Gly Trp Thr Val Phe
130 135 140

Gln Arg Arg Leu Asp Gly Ser Val Asp Phe Phe Arg Asp Trp Thr Ser
145 150 155 160

Tyr Lys Arg Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn
165 170 175

Asp Asn Ile His Ala Leu Thr Thr Gln Gly Thr Ser Glu Leu Arg Val
180 185 190

Asp Leu Ser Asp Phe Glu Gly Lys His Asp Phe Ala Lys Tyr Ser Ser
195 200 205

Phe Gln Ile Gln Gly Glu Ala Glu Lys Tyr Lys Leu Ile Leu Gly Asn
210 215 220

Phe Leu Gly Gly Ala Gly Asp Ser Leu Thr Pro His Asn Asn Arg
225 230 235 240

Leu Phe Ser Thr Lys Asp Gln Asp Asn Asp Gly Ser Thr Ser Ser Cys
245 250 255

Ala Met Gly Tyr His Gly Ala Trp Trp Tyr Ser Gln Cys His Thr Ser
260 265 270

Asn Leu Asn Gly Leu Tyr Leu Arg Gly Pro His Lys Ser Tyr Ala Asn
275 280 285

Gly Val Asn Trp Lys Ser Trp Arg Gly Tyr Asn Tyr Ser Cys Lys Val
290 295 300

Ser Glu
305

<210> 131
<211> 334
<212> PRT
<213> Mus musculus

<400> 131

Met Gln Trp Pro Thr Leu Trp Ala Phe Ser Gly Leu Leu Cys Leu Cys
1 5 10 15

Pro Ser Gln Ala Leu Gly Gln Glu Arg Gly Ala Cys Pro Asp Val Lys
20 25 30

Val Val Gly Leu Gly Ala Gln Asp Lys Val Val Val Ile Gln Ser Cys
35 40 45

Pro Gly Phe Pro Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Ser Pro
50 55 60

Ala Gly Arg Gly Glu Arg Gly Phe Gln Gly Ser Pro Gly Lys Met Gly
65 70 75 80

Pro Ala Gly Ser Lys Gly Glu Pro Gly Thr Met Gly Pro Pro Gly Val
85 90 95

Lys Gly Glu Lys Gly Asp Thr Gly Ala Ala Pro Ser Leu Gly Glu Lys
100 105 110

Glu Leu Gly Asp Thr Leu Cys Gln Arg Gly Pro Arg Ser Cys Lys Asp
115 120 125

Leu Leu Thr Arg Gly Ile Phe Leu Thr Gly Trp Tyr Thr Ile His Leu
130 135 140

Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Val Asp Gly
145 150 155 160

Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp Gly Ser Ile Asp Phe
165 170 175

Phe Arg Asp Trp Asp Ser Tyr Lys Arg Gly Phe Gly Asn Leu Gly Thr
180 185 190

Glu Phe Trp Leu Gly Asn Asp Tyr Leu His Leu Leu Thr Ala Asn Gly
195 200 205

Asn Gln Glu Leu Arg Val Asp Leu Gln Asp Phe Gln Gly Lys Gly Ser
210 215 220

Tyr Ala Lys Tyr Ser Ser Phe Gln Val Ser Glu Glu Gln Glu Lys Tyr
225 230 235 240

Lys Leu Thr Leu Gly Gln Phe Leu Glu Gly Thr Ala Gly Asp Ser Leu
245 250 255

Thr Lys His Asn Asn Met Ser Phe Thr Thr His Asp Gln Asp Asn Asp
260 265 270

Ala Asn Ser Met Asn Cys Ala Ala Leu Phe His Gly Ala Trp Trp Tyr
275 280 285

His Asn Cys His Gln Ser Asn Leu Asn Gly Arg Tyr Leu Ser Gly Ser
290 295 300

His Glu Ser Tyr Ala Asp Gly Ile Asn Trp Gly Thr Gly Gln Gly His
305 310 315 320

His Tyr Ser Tyr Lys Val Ala Glu Met Lys Ile Arg Ala Ser
325 330

<210> 132

<211> 319

<212> PRT

<213> Rattus norvegicus

<400> 132

Met Val Leu Gly Ser Ala Ala Leu Phe Val Leu Ser Leu Cys Val Thr
1 5 10 15

Glu Leu Thr Leu His Ala Ala Asp Thr Cys Pro Glu Val Lys Val Leu

20

25

30

Asp Leu Glu Gly Ser Asn Lys Leu Thr Ile Leu Gln Gly Cys Pro Gly
35 40 45

Leu Pro Gly Ala Leu Gly Pro Lys Gly Glu Ala Gly Ala Lys Gly Asp
50 55 60

Arg Gly Glu Ser Gly Leu Pro Gly His Pro Gly Lys Ala Gly Pro Thr
65 70 75 80

Gly Pro Lys Gly Asp Arg Gly Glu Lys Gly Val Arg Gly Glu Lys Gly
85 90 95

Asp Thr Gly Pro Ser Gln Ser Cys Ala Thr Gly Pro Arg Thr Cys Lys
100 105 110

Glu Leu Leu Thr Arg Gly Tyr Phe Leu Thr Gly Trp Tyr Thr Ile Tyr
115 120 125

Leu Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Thr Asp
130 135 140

Gly Gly Gly Trp Thr Val Phe Gln Arg Arg Ile Asp Gly Thr Val Asp
145 150 155 160

Phe Phe Arg Asp Trp Thr Ser Tyr Lys Gln Gly Phe Gly Ser Gln Leu
165 170 175

Gly Glu Phe Trp Leu Gly Asn Asp Asn Ile His Ala Leu Thr Thr Gln
180 185 190

Gly Thr Asn Glu Leu Arg Val Asp Leu Ala Asp Phe Asp Gly Asn His
195 200 205

Asp Phe Ala Lys Tyr Ser Ser Phe Gln Ile Gln Gly Glu Ala Glu Lys
210 215 220

Tyr Lys Leu Ile Leu Gly Asn Phe Leu Gly Gly Ala Gly Asp Ser
225 230 235 240

Leu Thr Ser Gln Asn Asn Met Leu Phe Ser Thr Lys Asp Gln Asp Asn
245 250 255

Asp Gln Gly Ser Ser Asn Cys Ala Val Arg Tyr His Gly Ala Trp Trp
260 265 270

Tyr Ser Asp Cys His Thr Ser Asn Leu Asn Gly Leu Tyr Leu Arg Gly
275 280 285

Leu His Lys Ser Tyr Ala Asn Gly Val Asn Trp Lys Ser Trp Lys Gly
290 295 300

Tyr Asn Tyr Ser Tyr Lys Val Ser Glu Met Lys Val Arg Leu Ile
305 310 315

<210> 133

<211> 334

<212> PRT

<213> Mus musculus

<400> 133

Met Gln Trp Pro Thr Leu Trp Ala Phe Ser Gly Leu Leu Cys Leu Cys
1 5 10 15

Pro Ser Gln Ala Leu Gly Gln Glu Arg Gly Ala Cys Pro Asp Val Lys
20 25 30

Val Val Gly Leu Gly Ala Gln Asp Lys Val Val Val Ile Gln Ser Cys
35 40 45

Pro Gly Phe Pro Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Ser Pro
50 55 60

Ala Gly Arg Gly Glu Arg Gly Phe Gln Gly Ser Pro Gly Lys Met Gly
65 70 75 80

Pro Ala Gly Ser Lys Gly Glu Pro Gly Thr Met Gly Pro Pro Gly Val
85 90 95

Lys Gly Glu Lys Gly Asp Thr Gly Ala Ala Pro Ser Leu Gly Glu Lys
100 105 110

Glu Leu Gly Asp Thr Leu Cys Gln Arg Gly Pro Arg Ser Cys Lys Asp
115 120 125

Leu Leu Thr Arg Gly Ile Phe Leu Thr Gly Trp Tyr Thr Ile His Leu
130 135 140

Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Val Asp Gly
145 150 155 160

Gly Gly Trp Thr Val Phe Gln Arg Arg Val Asp Gly Ser Ile Asp Phe
165 170 175

Phe Arg Asp Trp Asp Ser Tyr Lys Arg Gly Phe Gly Asn Leu Gly Thr
180 185 190

Glu Phe Trp Leu Gly Asn Asp Tyr Leu His Leu Leu Thr Ala Asn Gly
195 200 205

Asn Gln Glu Leu Arg Val Asp Leu Gln Asp Phe Gln Gly Lys Gly Ser
210 215 220

Tyr Ala Lys Tyr Ser Ser Phe Gln Val Ser Glu Glu Gln Glu Lys Tyr
225 230 235 240

Lys Leu Thr Leu Gly Gln Phe Leu Glu Gly Thr Ala Gly Asp Ser Leu
245 250 255

Thr Lys His Asn Asn Met Ser Phe Thr Thr His Asp Gln Asp Asn Asp
260 265 270

Ala Asn Ser Met Asn Cys Ala Ala Leu Phe His Gly Ala Trp Trp Tyr
275 280 285

His Asn Cys His Gln Ser Asn Leu Asn Gly Arg Tyr Leu Ser Gly Ser
290 295 300

His Glu Ser Tyr Ala Asp Gly Ile Asn Trp Gly Thr Gly Gln Gly His
305 310 315 320

His Tyr Ser Tyr Lys Val Ala Glu Met Lys Ile Arg Ala Ser
325 330

<210> 134
<211> 326
<212> PRT
<213> Homo sapiens

<400> 134

Met Glu Leu Ser Gly Ala Thr Met Ala Arg Gly Leu Ala Val Leu Leu

1

5

10

15

Val Leu Phe Leu His Ile Lys Asn Leu Pro Ala Gln Ala Ala Asp Thr
20 25 30

Cys Pro Glu Val Lys Val Val Gly Leu Glu Gly Ser Asp Lys Leu Thr
35 40 45

Ile Leu Arg Gly Cys Pro Gly Leu Pro Gly Ala Pro Gly Pro Lys Gly
50 55 60

Glu Ala Gly Val Ile Gly Glu Arg Gly Glu Arg Gly Leu Pro Gly Ala
65 70 75 80

Pro Gly Lys Ala Gly Pro Val Gly Pro Lys Gly Asp Arg Gly Glu Lys
85 90 95

Gly Met Arg Gly Glu Lys Gly Asp Ala Gly Gln Ser Gln Ser Cys Ala
100 105 110

Thr Gly Pro Arg Asn Cys Lys Asp Leu Leu Asp Arg Gly Tyr Phe Leu
115 120 125

Ser Gly Trp His Asn Ile Tyr Leu Pro Asp Cys Arg Pro Leu Thr Val
130 135 140

Leu Cys Asp Met Asp Thr Asp Gly Gly Trp Thr Val Phe Gln Arg
145 150 155 160

Arg Met Asp Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys
165 170 175

Gln Gly Phe Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp Asn
180 185 190

Ile His Ala Leu Thr Ala Gln Gly Ser Ser Glu Leu Arg Val Asp Leu
195 200 205

Val Asp Phe Glu Gly Asn His Gln Phe Ala Lys Tyr Lys Ser Phe Lys
210 215 220

Val Ala Asp Glu Ala Glu Lys Tyr Lys Leu Val Leu Gly Ala Phe Val
225 230 235 240

Gly Gly Ser Ala Gly Asn Ser Leu Thr Gly His Asn Asn Asn Phe Phe
245 250 255

Ser Thr Lys Asp Gln Asp Asn Asp Val Ser Ser Ser Asn Cys Ala Glu
260 265 270

Lys Phe Gln Gly Ala Trp Trp Tyr Ala Asp Cys His Ala Ser Ser Leu
275 280 285

Asn Gly Leu Tyr Leu Met Gly Pro His Glu Ser Tyr Ala Asn Gly Ile
290 295 300

Asn Trp Ser Ala Ala Lys Gly Tyr Lys Tyr Ser Tyr Lys Val Ser Glu
305 310 315 320

Met Lys Val Arg Pro Ala
325

<210> 135

<211> 323

<212> PRT

<213> Sus scrofa

<400> 135

Met Asp Thr Arg Gly Val Ala Ala Ala Met Arg Pro Leu Val Leu Leu
1 5 10 15

Val Ala Phe Leu Cys Thr Ala Ala Pro Ala Leu Asp Thr Cys Pro Glu
20 25 30

Val Lys Val Val Gly Leu Glu Gly Ser Asp Lys Leu Ser Ile Leu Arg
35 40 45

Gly Cys Pro Gly Leu Pro Gly Ala Ala Gly Pro Lys Gly Glu Ala Gly
50 55 60

Ala Ser Gly Pro Lys Gly Gly Gln Gly Pro Pro Gly Ala Pro Gly Glu
65 70 75 80

Pro Gly Pro Pro Gly Pro Lys Gly Asp Arg Gly Glu Lys Gly Glu Pro
85 90 95

Gly Pro Lys Gly Glu Ser Trp Glu Thr Glu Gln Cys Leu Thr Gly Pro
100 105 110

Arg Thr Cys Lys Glu Leu Leu Thr Arg Gly His Ile Leu Ser Gly Trp
115 120 125

His Thr Ile Tyr Leu Pro Asp Cys Gln Pro Leu Thr Val Leu Cys Asp
130 135 140

Met Asp Thr Asp Gly Gly Trp Thr Val Phe Gln Arg Arg Ser Asp
145 150 155 160

Gly Ser Val Asp Phe Tyr Arg Asp Trp Ala Ala Tyr Lys Arg Gly Phe
165 170 175

Gly Ser Gln Leu Gly Glu Phe Trp Leu Gly Asn Asp His Ile His Ala
180 185 190

Leu Thr Ala Gln Gly Thr Asn Glu Leu Arg Val Asp Leu Val Asp Phe
195 200 205

Glu Gly Asn His Gln Phe Ala Lys Tyr Arg Ser Phe Gln Val Ala Asp
210 215 220

Glu Ala Glu Lys Tyr Met Leu Val Leu Gly Ala Phe Val Glu Gly Asn
225 230 235 240

Ala Gly Asp Ser Leu Thr Ser His Asn Asn Ser Leu Phe Thr Thr Lys
245 250 255

Asp Gln Asp Asn Asp Gln Tyr Ala Ser Asn Cys Ala Val Leu Tyr Gln
260 265 270

Gly Ala Trp Trp Tyr Asn Ser Cys His Val Ser Asn Leu Asn Gly Arg
275 280 285

Tyr Leu Gly Gly Ser His Gly Ser Phe Ala Asn Gly Val Asn Trp Ser
290 295 300

Ser Gly Lys Gly Tyr Asn Tyr Ser Tyr Lys Val Ser Glu Met Lys Phe
305 310 315 320

Arg Ala Thr

<210> 136
<211> 319
<212> PRT
<213> Homo sapiens

<400> 136

Met Ala Arg Gly Leu Ala Val Leu Leu Val Leu Phe Leu His Ile Lys
1 5 10 15

Asn Leu Pro Ala Gln Ala Ala Asp Thr Cys Pro Glu Val Lys Val Val
20 25 30

Gly Leu Glu Gly Ser Asp Lys Leu Thr Ile Leu Arg Gly Cys Pro Gly
35 40 45

Leu Pro Gly Ala Pro Gly Pro Lys Gly Glu Ala Gly Val Ile Gly Glu
50 55 60

Arg Gly Glu Arg Gly Leu Pro Gly Ala Pro Gly Lys Ala Gly Pro Val
65 70 75 80

Gly Pro Lys Gly Asp Arg Gly Glu Lys Gly Met Arg Gly Glu Lys Gly
85 90 95

Asp Ala Gly Gln Ser Gln Ser Cys Ala Thr Gly Pro Arg Asn Cys Lys
100 105 110

Asp Leu Leu Asp Arg Gly Tyr Phe Leu Ser Gly Trp His Thr Ile Tyr
115 120 125

Leu Pro Asp Cys Arg Pro Leu Thr Val Leu Cys Asp Met Asp Thr Asp
130 135 140

Gly Gly Gly Trp Thr Val Phe Gln Arg Arg Met Asp Gly Ser Val Asp
145 150 155 160

Phe Tyr Arg Asp Trp Ala Ala Tyr Lys Gln Gly Phe Gly Ser Gln Leu
165 170 175

Gly Glu Phe Trp Leu Gly Asn Asp Asn Ile His Ala Leu Thr Ala Gln
180 185 190

Gly Ser Ser Glu Leu Arg Val Asp Leu Val Asp Phe Glu Gly Asn His
195 200 205

Gln Phe Ala Lys Tyr Lys Ser Phe Lys Val Ala Asp Glu Ala Glu Lys
210 215 220

Tyr Lys Leu Val Leu Gly Ala Phe Val Gly Gly Ser Ala Gly Asn Ser
225 230 235 240

Leu Thr Gly His Asn Asn Asn Phe Phe Ser Thr Lys Asp Gln Asp Asn
245 250 255

Asp Val Ser Ser Ser Asn Cys Ala Glu Lys Phe Gln Gly Ala Trp Trp
260 265 270

Tyr Ala Asp Cys His Ala Ser Asn Leu Asn Gly Leu Tyr Leu Met Gly
275 280 285

Pro His Glu Ser Tyr Ala Asn Gly Ile Asn Trp Ser Ala Ala Lys Gly
290 295 300

Tyr Lys Tyr Ser Tyr Lys Val Ser Glu Met Lys Val Arg Pro Ala
305 310 315

<210> 137

<211> 187

<212> PRT

<213> Drosophila melanogaster

<400> 137

Met Lys Ser Cys Phe Phe Val Leu Phe Leu Trp Thr Leu Leu Phe Glu
1 5 10 15

Val Gly Gln Ser Ser Pro His Thr Cys Pro Ser Gly Ser Pro Asn Gly
20 25 30

Ile His Gln Leu Met Leu Pro Glu Glu Pro Phe Gln Val Thr Gln
35 40 45

Cys Lys Thr Thr Ala Arg Asp Trp Ile Val Ile Gln Arg Arg Leu Asp
50 55 60

Gly Ser Val Asn Phe Asn Gln Ser Trp Phe Ser Tyr Lys Asp Gly Phe
65 70 75 80

Gly Asp Pro Asn Gly Glu Phe Phe Ile Gly Leu Gln Lys Leu Tyr Leu
85 90 95

Met Thr Arg Glu Gln Pro His Glu Leu Phe Ile Gln Leu Lys His Gly
100 105 110

Pro Gly Ala Thr Val Tyr Ala His Phe Asp Asp Phe Gln Val Asp Ser
115 120 125

Glu Thr Glu Leu Tyr Lys Leu Glu Arg Val Gly Lys Tyr Ser Gly Thr
130 135 140

Ala Gly Asp Ser Leu Arg Tyr His Ile Asn Lys Arg Phe Ser Thr Phe
145 150 155 160

Asp Arg Asp Asn Asp Glu Ser Ser Lys Asn Cys Ala Ala Glu His Gly
165 170 175

Gly Gly Trp Trp Phe His Ser Cys Leu Ser Arg
180 185